



NATIONAL UNIVERSITY OF MEDICAL SCIENCES
(NUMSS)

TITLE OF DISSERTATION:
A DESCRIPTIVE STUDY OF THE EFFECTS OF
DRY NEEDLING AND AURICULAR ACUPUNCTURE
IN HEADACHES

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PROGRAM:

Doctor of Physical Therapy (DPT)

March 2020

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PT, DPT, DO, DBA

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Acknowledgements

I would like to express my special thanks of gratitude to Dr. Nadali Esmaeili, who inspired me for the first time to learn and practice Acupuncture. He is the board member of the World Federation of Acupuncture Societies (WFAS) in Beijing, China.

I also recognize the role of both managing and educational staff of the World Federation of Acupuncture Societies (WFAS) in China, Research Institute of Traditional and Alternative Medicine in Armenia and "R&D Center of International Sujok Association" in India. I was able to acquire helpful knowledge and skills of Acupuncture with them outside my home country.

I would like to acknowledge Dr. Akbar hemmati and Dr. Mehrdad Bahramian who taught me the fundamentals of Dry Needling. They were also the consultants for reconsidering some needling techniques in the essay.

I am grateful to my brother Dr. Mehdi Doosti who gave me valuable help with checking the format and structure of some sections of the essay.

I would like to thank my artist brother Ali Doosti who edited and improved the photos of the book. He is an architecture and a professional photographer.

I wish to present my honest regards to Dr. Farjoud Shokouhi, the Iranian vocational and scientific activist of Physiotherapy who supervised me in a perfect manner to write this essay as the dissertations for the DPT course in NUMSS University.

Finally, I wish to express my sincere gratitude to my colleague Dr. Nooshin Eftekhari who was a source of inspiration for me to practice acupuncture more specifically on headache conditions.

Introduction

Headaches are one of the most common medical complaints that the most people experience at some point in their life. A headache can be a sign of stress or emotional distress, or it can result from a medical disorder, such as migraine or high blood pressure, anxiety, or depression. A headache simply means a pain or discomfort felt in the head region -whether it is the face, back of the head (occiput), forehead, scalp, behind the eyes etc. A headache can also be caused by referral from the upper neck or even teeth and sinuses. It can also be present even though there is no actual organic cause for it, for instance depression that is due to mental and psychotic causes.

Headache disorders are a cause of pain and disability. Evidence indicates that in primary care, 4.4 out of 100 patients per year consult with headache and headache accounts for up to 30% of neurology out-patient appointments. They also have a substantial societal burden. Migraine, for example, occurs in 15% of the UK adult population, and more than 100,000 people are absent from work or school as a result of migraine every working day.

Many non-specialist healthcare professionals can find the diagnosis of headache difficult, and both people with headache and their healthcare professionals can be concerned about possible serious underlying causes. This leads to variability in care and may mean that people with headaches are not always offered the most appropriate treatments.

As a personal concern, I visited many patients who experienced various remedies but were frustrated to treat their headaches. It was because their physicians tried to treat them with an absolute medical attitude, missing etiologies beyond classical and conventional medicine, even the reasons for those headaches caused by musculoskeletal disorders such as myofascial trigger points or cervical imbalances that create cervicogenic headaches.

Lots of cases suffering from headaches declared that although they consulted the best doctors in the country, there was no considerable relief in their pain. This was especially true for those cases who had just received temporary pain-killing medications with the least actual long-term pain control.

In Physiotherapy Clinics we previously used to offer specific treatments like pain-relieving electrotherapy methods, but recently the more effective methods such as Dry Needling and manual techniques for head pain has been introduced to Physiotherapy. As the manual therapy for cervical spine and muscles could relieve cervicogenic headaches, the patients with pain and spasm in the neck and shoulder area who were treated by Dry Needling reported that their headaches got better as well.

I noticed that the headache sufferers for whom I practiced Acupuncture or Dry Needling enjoyed a long-lasting and more satisfactory treatment. They were able to live a better, calmer, kinder and more hopeful life with better communication and productivity both at work and at home.

As I have been learning the Traditional Chinese Acupuncture along with the Modern Western Dry Needling for the past few years, I have achieved an integrative outlook. Therefore, I believe that we must not neglect the privileges of traditional medicine of the East while appreciating the basis of the modern medical sciences of the West. However, the headache sufferers' lack of sufficient knowledge of their condition, as well as the medical system's inappropriate approach in this field persuaded me to study and investigate the role and function of acupuncture in the treatment of

headaches, integrating the outlook of the west and the east also the achievements of the ancient and the modern times, the results of which were published in the present essay.

To write this book, the most practical issues of the most reliable sources in the recent decades, the insights taken from attending respective national and international workshops, in addition to the experiences of acupuncture practice in the private clinic were utilized and abridged to introduce the essentials of acupuncture and its subcategories. Then the specific prescription of each method to treat headaches were presented.

In this essay we learn the causes and classifications of headaches, the difference between Western and Oriental Acupuncture (Dry Needling and Chinese Acupuncture), myofascial pain and the role of Dry Needling to treat headaches, theories and concepts of Acupuncture and Traditional Chinese Medicine, standard meridians, Extraordinary meridians, standard and extra acupuncture points, Microsystem Acupuncture, the treatment of headaches by regular acupuncture, Scalp Acupuncture, Auricular Acupuncture, Eye Acupuncture, Face Acupuncture, Abdominal Acupuncture, Hand and Foot Acupuncture (Sujok Therapy) and Master Tung's Acupuncture.

The focus is on describing the techniques of Dry Needling and Auricular Acupuncture, besides the effects of the methods of the two approaches to treat headaches and pain in the neck. In the appendix section, you can find the press interviews and visits of the writer of the essay with the world's prominent acupuncturists on international events, also the photos of different methods of Headache Acupuncture practiced by him.

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March 20, 2020

CHAPTER 1

HEADACHES AND ACUPUNCTURE

HEADACHES

(Causes, Classifications and Treatments)

What is Headache?

Headaches are one of the most common medical complaints; most people experience them at some point in their life. They can affect anyone regardless of age, race, and gender. The World Health Organization (WHO) reports that almost half of all adults worldwide will experience a headache in any given year. A headache can be a sign of stress or emotional distress, or it can result from musculoskeletal imbalances, or a medical disorder such as migraine or high blood pressure, anxiety, or depression. People with chronic migraine headaches, for example, may find it hard to attend work or school regularly.

Causes of Headaches

A headache can occur in any part of the head, on both sides of the head, or in just one location. There are different ways to define headaches. The International Headache Society (IHS) categorize headaches as primary, when they are not caused by another condition, or secondary, when there is a further underlying cause.

Primary headaches

A primary headache is one that is not caused by another condition — it is the condition itself. Primary headaches are stand-alone illnesses caused directly by the over activity of, or problems with, structures in the head that are pain-sensitive. This includes the blood vessels, muscles, and nerves of the head and neck. They may also result from changes in chemical activity in the brain. Common primary headaches include migraines, cluster headaches, and tension headaches.

1. Migraines

A person who has a migraine will characteristically feel an intense throbbing pain on just one side of the head (Fig 1-1). The person may experience a heightened sensitivity to light, sound, and smell. Nausea and vomiting are also common. Around a third of people experience an aura before the onset of a migraine. These are visual and sensory disturbances that typically last between 5 and 60 minutes.

Although a migraine can occur in both adults and children, it is three times more likely to develop in females than males. Migraines are also more common in people with certain pre-existing conditions, such as depression and epilepsy. Over-the-counter (OTC) painkillers, such as ibuprofen or aspirin, can stop headaches or reduce pain and duration. Doctors can prescribe an antiemetic drug to relieve nausea and vomiting, such as metoclopramide or ondansetron. Migraine-specific combination drugs are also available.

A migraine headache involves recurring episodes (two or more a month) of head pain, plus sensitivity to light and sound. Nausea, vomiting, and neck pain can accompany the pain. Ten to 20 percent of the time the person who is about to experience a migraine gets a warning, called an aura.

An aura may be a tingling sensation or visual distortion (seeing zigzag lines) that lasts 10 to 30 minutes.

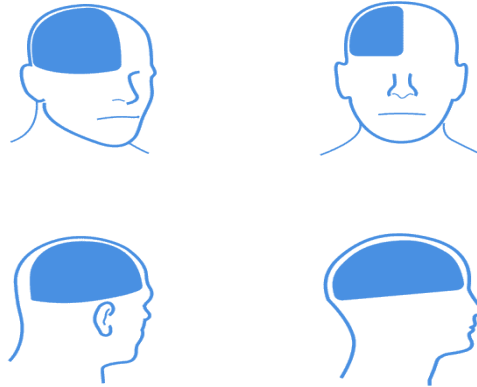


Fig 1-1. Location of Migraine Headaches

2. Tension Headaches

Tension headaches are very common, and most people will experience them occasionally. They present as a dull, constant pain felt on both sides of the head (Fig 1-2). Other symptoms can include:

- tenderness of the face, head, neck, and shoulders
- a feeling of pressure behind the eyes
- sensitivity to light and sound

These headaches normally last from 30 minutes to several hours. Severity can vary, but they rarely prevent normal activities. The cause of tension headaches is unclear, but stress, anxiety, and depression are common triggers.

OTC painkillers, such as ibuprofen, acetaminophen, and aspirin are usually very effective in stopping or reducing pain. Individuals experiencing a headache on more than 15 days per month over 90 days should see a doctor. Lifestyle changes and some treatments may help prevent tension headaches. Tension headaches can be caused by contractions of the muscles in the head and neck, and expanded blood vessels in the scalp can contribute to the discomfort.

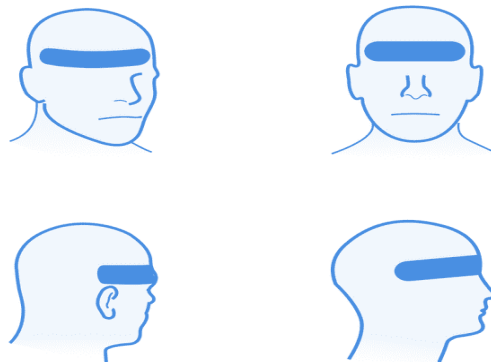


Fig 1-2. Location of Tension Headache

3. Cluster Headaches

Cluster headaches are severe and recurrent headaches that are six times more likely to develop in men than in women. People describe an intense burning or piercing pain behind or around one eye (Fig 1-3). Cluster headaches are usually sudden, without warning, and last between 15 minutes and 3 hours. People can experience up to eight attacks a day.

Attacks tend to occur in daily clusters that can persist for weeks or months. They typically take place at the same time of day, which can often be a couple of hours after falling asleep at night.

The cause of cluster headaches is unclear, but they are more likely to occur in smokers. People should avoid alcohol during attack periods.

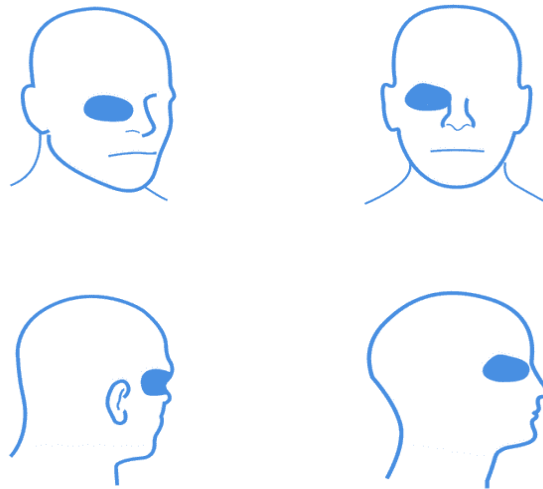


Fig 1-3. Location of Cluster Headache

4. Exertional headaches

Exertional headaches are a group of headache syndromes, which are associated with some physical activity (Fig 1-4). These headaches typically become severe very quickly after a strenuous activity.

These headaches are usually very short-lived but can sometimes last up to 2 days. They present as a throbbing pain felt throughout the head and are more common in those with a family history of migraine.



Fig 1-4. Location of Exertional Headache: Anywhere around the Head

5. Giant Cell Arteries

Giant cell arteritis (GCA) is relatively uncommon. It affects around 0.25% of adults over 50, and is virtually unknown in people younger than this. Nonetheless, the condition is serious and can cause permanent vision loss (Fig 1-5). Giant cell arteritis occurs when the arteries in your head or neck become inflamed. The symptoms tend to present very quickly, and people suffering from giant cell arteritis normally report that they had little or no warning before the pain began. Because giant cell arteritis can lead to permanent vision loss, it is important to treat it as a medical emergency.

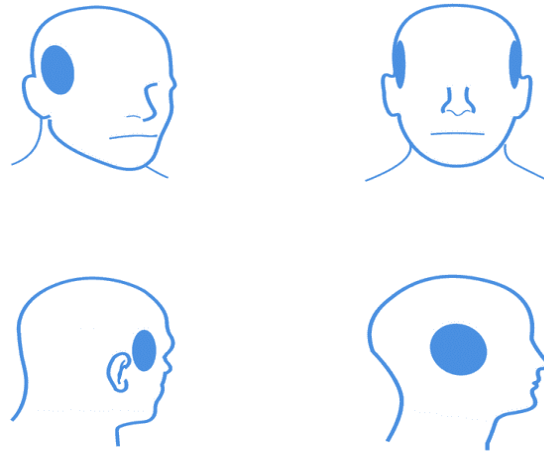


Fig 1-5. Location of Giant cell arteritis Headache

Secondary Headaches

A secondary headache is a symptom of something else, such as a headache resulting from a head injury or sudden caffeine withdrawal. Secondary headaches happen when another condition stimulates the pain-sensitive nerves of the head. In other words, the headache symptoms can be attributed to another cause.

A wide range of different factors can cause secondary headaches. These include:

- alcohol-induced hangover
- brain tumor
- blood clots
- bleeding in or around the brain
- "brain freeze," or ice-cream headaches
- carbon monoxide poisoning
- concussion
- dehydration
- glaucoma
- teeth-grinding at night
- influenza
- overuse of pain medication, known as rebound headaches
- panic attacks
- stroke

As headaches can be a symptom of a serious condition, it is important to seek medical advice if they become more severe, regular, or persistent.

1. Medication-overuse headaches

A medication-overuse headache (MOH) — sometimes known as a rebound headache — is the most common type of secondary headache. A MOH is marked by frequent or daily headaches with symptoms similar to those of either tension headaches or migraines. These headaches initially respond to painkillers but then reoccur sometime later. MOH can result from taking painkillers on more than 15 days in a month. The only treatment for MOH is to stop taking the medication behind the headaches. Anybody stopping medication should do so under the supervision of a doctor.

2. Sinus headaches

Sinus headaches are caused by sinusitis — a swelling of the sinuses — which is usually the result of an infection or an allergy. The symptoms consist of a dull, throbbing ache around the eyes, cheeks, and forehead. The pain may worsen with movement or straining and can sometimes spread to the teeth and jaw (Fig 1-6).

These headaches are usually accompanied by a thick green or yellow nasal discharge. Other symptoms may include blocked nose, fever, nausea, and light or sound sensitivity. Sinus headaches can be treated with OTC painkillers and nasal decongestants. A doctor may prescribe antibiotics if they think a bacterial infection has caused the headache, or antihistamines in the case of an allergy. Doctors may also prescribe a corticosteroid nasal spray to help reduce the swelling.

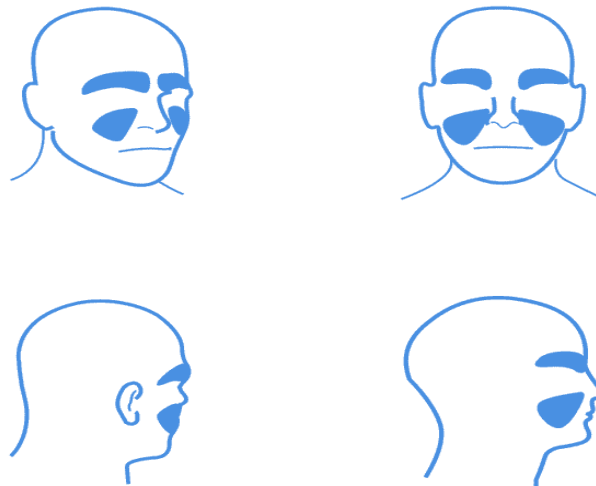


Fig 1-6. Location of Sinus Headaches

3. Caffeine-related Headaches

Heavy caffeine consumption — more than 400 milligrams (mg), or around 4 cups of coffee — can sometimes lead to headaches. In people consuming more than 200 mg of caffeine daily for over 2 weeks, withdrawal may result in migraine-like headaches. These typically develop within 24 hours after stopping abruptly. Limiting caffeine consumption is sometimes recommended for people who have chronic migraine.

4. Head-Injury Headaches

Minor bumps and blows to the head and neck are common and are usually nothing to worry about. Sometimes, a headache may develop immediately or soon after. These are often similar to migraine or tension headaches and can usually be treated with OTC painkillers.

5. Menstrual Headaches

Menstrual Headaches are often related to changes in hormone levels. In women, migraine is frequently linked with periods due to natural changes in estrogen levels. These menstrual migraines develop in the days just before or during a period, or sometimes during ovulation. Symptoms are similar to migraine without aura but can last longer or be more debilitating. Treatment for a menstrual headache is the same as the treatment for migraine without aura.

6. Hangover Headaches

Consuming too much alcohol can lead to a throbbing headache the next morning or even later that day. These migraine-like headaches are usually felt on both sides of the head and are made worse by movement. Someone who has a hangover headache may also experience nausea and sensitivity to light. There are no cures for hangovers, but it is possible to relieve symptoms by drinking plenty of water and eating sugary foods. OTC painkillers may help reduce or stop the headache pain. Symptoms of hangovers tend to go away within 72 hours.

7. Thunderclap Headaches

A thunderclap headache is an extremely painful headache that comes on suddenly, like a clap of thunder. These are sudden, severe headaches that are often described as the "worst headache of my life." This type of headache reaches its most intense pain within 1 minute and lasts at least 5 minutes. Thunderclap headaches strike without any warning. Some of these headaches are benign (not dangerous). But they can also be a sign of very serious underlying conditions that involve bleeding in and around the brain. It is important to seek medical attention immediately to rule out life-threatening causes of a thunderclap headache.

8. Cervicogenic Headaches

Cervicogenic headaches are the most important types of headaches to treat in Physiotherapy and Acupuncture clinics. A cervicogenic headache is a pain that develops in the neck, though a person feels the pain in the head (Fig 1-7). The pain caused by a cervicogenic headache begins in the neck and the back of the head and radiates towards the front of the head. People may confuse cervicogenic headaches with migraines and tension headaches, both of which can cause neck pain.

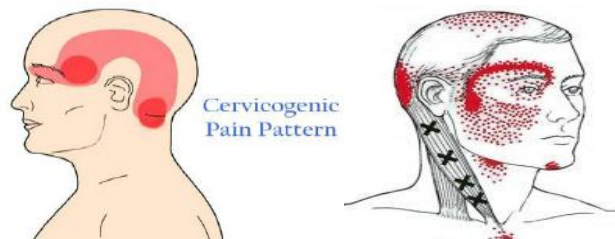


Fig 1-7. Location of Cervicogenic Headaches

Symptoms: Typically, people who have cervicogenic headaches experience a headache accompanied by neck pain and stiffness. Certain neck movements can provoke cervicogenic headaches. In most cases, cervicogenic headaches develop on one side of the head, starting from the back of the head and neck and radiating toward the front. Some other symptoms of a cervicogenic headache include:

- a reduced range of motion in the neck
- pain on one side of the face or head
- pain and stiffness of the neck
- pain around the eyes
- pain in the neck, shoulder, or arm on one side
- head pain that is triggered by certain neck movements or positions
- sensitivity to light and noise
- nausea
- blurred vision

Causes of cervicogenic headaches: Cervicogenic headaches result from *structural problems* in the neck and are often due to problems with cervical vertebrae, and specifically the C2-3 vertebra. Some people develop cervicogenic headaches because they work in jobs that involve them straining their necks. These jobs include hair stylists, manual laborers, and drivers. People can also develop cervicogenic headaches after an injury to the neck. This is better known as whiplash.

Treatments for Cervicogenic Headaches: Treatments for cervicogenic headaches focus on removing the cause of the pain. Treatments vary depending on the person and the severity of their symptoms. Some treatments for cervicogenic headaches include:

- **Medications**

A healthcare provider may recommend prescription or over-the-counter pain medications to relieve painful or uncomfortable symptoms.

- **Physical Therapy**

Physical therapy is an effective treatment for cervicogenic headaches since a structural problem in the neck usually causes them. People can work with a physical therapist to develop specialized treatment programs. At the first appointment, a physical therapist will identify the source of the pain. From there, they may stimulate the soft tissue and move the joints around to relieve painful symptoms.

TENS¹ units are *Physiotherapy modalities* using small electrodes placed on the skin to send small electrical signals to stimulate nerves near the source of pain. TENS may help some people with a cervicogenic headache, but the relief does not usually last very long.

¹ . Transcutaneous Electrical Nerve Stimulation

There is another technique in physical therapy called 'sustained natural apophyseal glide' (SNAG). SNAG involves using a towel to manipulate the areas of the neck that are causing painful symptoms.

Other helpful *methods and modalities of physiotherapy* for headaches are Laser Therapy, Magnet Therapy, Infra-red, Ultra-sound, Shockwave Therapy, Matrix Rhythm Therapy, stretching and strengthening exercises, and Manual Therapy techniques.

- **Nerve blocks**

A doctor can inject pain-numbing medicine into nerves and joints in the head and neck. These often provide pain relief and can help determine the source of the pain.

- **Neuro-modulation**

Neuro-modulation is a surgery which involves placing electrodes on the back of the head or neck. When connected to a pulse generator via a thin wire, these electrodes stimulate the occipital nerve. This therapy may help people with cervicogenic headaches when other treatments have not worked.

Common Practices to treat any type of headaches

(General Treatment)

- **Medication Treatments**

The most common ways of treating headaches are rest and pain relief medication. Generic pain relief medication is available over the counter (OTC), or doctors can prescribe preventative medication, such as tricyclic antidepressants, serotonin receptor agonists, anti-epileptic drugs, and beta-blockers. It is important to follow the doctor's advice because overusing pain relief medication can lead to rebound headaches. Sometimes, a headache may result from a deficiency of a particular nutrient or nutrients, especially magnesium and certain B vitamins. Nutrient deficiencies can be due to a poor quality diet, underlying malabsorption issues, or other medical conditions.

- **Physiotherapy Treatments**

- Dry Needling
- Different types of Physiotherapy Modalities including Laser Therapy, Interferential Therapy, Tens, Ultrasound, Magnet therapy, Shockwave, Matrix Rhythm Therapy, Infrared and Hot pack
- Manipulation of Neck and Cervical Traction
- Massage and Stretching

- **Alternative Treatments**

Several alternative forms of treatment for headaches are available, but physicians believe that it is important to consult a doctor before beginning any alternative forms of treatment. Alternative approaches include:

- Acupuncture
- Cognitive behavior therapy
- Herbal and nutritional health products
- Hypnosis
- Meditation

- **Home Remedies**

A number of steps can be taken to reduce the risk of headaches and to ease the pain:

1. Apply a heat pack or ice pack to your head or neck, but avoid extreme temperatures.
2. Avoid stressors, where possible, and develop healthy coping strategies for unavoidable stress.
3. Eat regular meals, taking care to maintain stable blood sugar.

A hot shower can help, although in one rare condition hot water exposure can trigger headaches. Exercising regularly and getting enough rest and regular sleep contributes to overall health and stress reduction.

The subjects in this section have been written mainly under the influence of medical views, while the mechanism of headaches is much beyond the scope of mere western medical sciences. Therefore, a broad knowledge including traditional, alternative and comprehensive medicine is also needed along with classical medicine to treat headaches effectively. Acupuncture with the least or no side effects has been proved as a very effective treatment for most types of headaches handling the root causes of headaches not merely the painful conditions. Acupuncture has two main approaches namely 'Traditional Chinese Acupuncture' and 'Modern Western Acupuncture' called Dry Needling. In this essay, we investigate the mechanism and the benefits of various approaches of Acupuncture in relieving Headaches. Then the two effective categories are reviewed in detail, concentrating on Dry Needling and Auricular Acupuncture.

AN INTRODUCTION TO ACUPUNCTURE AND DRY NEEDLING

What is Acupuncture?

Acupuncture is a traditional Chinese medicine (TCM) practice that originated thousands of years ago. It is based on the premise that a blockage or disturbance in the flow of the body's life energy, or "qi," can cause health issues. Acupuncturists insert hair-thin needles to specific acupuncture points throughout the body to restore the flow of qi, balance the body's energy, stimulate healing, and promote relaxation. According to TCM theory, there are over 1000 acupuncture points on the body, each lying on an invisible energy channel, or "meridian." Each meridian is associated with a different organ system.

Researchers don't fully understand how acupuncture might work, but there are numerous theories. One theory is that acupuncture works by stimulating the release of endorphins, the body's natural pain-relieving chemicals. Acupuncture is also said to influence the autonomic nervous system (which controls bodily functions) and the release of chemicals that regulate blood flow and pressure, reduce inflammation, and calm the brain.

Uses of Acupuncture

Acupuncture is said to be useful in addressing a variety of health conditions, including:

- Rheumatoid Arthritis and Osteoarthritis
- Chronic pain (such as headaches, back pain, neck pain)
- Pain in dentistry (including dental pain and temporomandibular dysfunction)
- Depression
- Insomnia
- Migraines
- Nausea and vomiting
- Back Pain and Sciatica
- Sinus congestion and Allergies
- Stress and anxiety
- Tinnitus
- Peptic ulcer, acute and chronic gastritis, and gastro-spasm
- Constipation and Flatulence
- Hypertension and Hypotension
- Weight loss
- Cosmetic Conditions

- Injuries and Trauma
- Repetitive strain conditions like tennis elbows and carpal tunnel syndrome
- Headaches
- Fibromyalgia
- Infertility
- Dysmenorrhea and other gynecological conditions
- Asthma
- Herpes zoster
- Stroke rehabilitation
- Bell's palsy
- Patients undergoing recovery from addiction and substance abuse

What to expect after the treatment?

Most patients feel pleasantly relaxed and refreshed after an acupuncture treatment. Patients who were experiencing pain before the acupuncture session are often pleasantly surprised to find their discomfort greatly reduced after the treatment.

What are the possible side effects of acupuncture?

Side effects are rare. Patients may occasionally experience slight bruising at the point of needle insertion. "*Needle Shock*": a feeling of faintness, chilliness and perhaps slight nausea. Needle shock happens rarely, but when it does, it is most likely to happen in situations in which the patient is very nervous about the needles, is extremely exhausted or fatigued, or is experiencing low blood sugar from not having eaten for a long period of time before the acupuncture treatment. Needle shock can be disquieting to the patient but is not considered harmful. Most states that regulate acupuncture require practitioners to provide informed consent forms outlining these possible side-effects.

Contraindication

The use of acupuncture is not as prominent or may even be contraindicated in the treatment of:

- ✓ Infants and very young children
- ✓ Very weak or very elderly patients
- ✓ People with immunodeficiency
- ✓ Patients suffering from certain bleeding disorders or severe blood loss
- ✓ Patients who are very weak, emaciated, who are suffering from low blood sugar, or who have collapsed due to fatigue and exhaustion
- ✓ Patients with significantly low blood pressure

- ✓ Patients who are suffering from extreme anxiety or who are very nervous about the needles
- ✓ Pregnancy: while acupuncture is generally considered safe for most women during pregnancy, there are certain acupuncture points that are forbidden during pregnancy. Pregnant women should talk with their doctor and their TCM practitioner about these restrictions and any other concerns regarding their pregnancy before undergoing an acupuncture treatment.

To get better results from Acupuncture treatments we may sometimes need more stimulation of needles. Some ways for this purpose include:

Electro acupuncture – Particularly useful for treating pain, electro acupuncture uses small clips on top of regular acupuncture needles to send an electric current in between two acupuncture needle points. The extra stimulation can improve the flow of energy between the points, helping heal pain.

Moxibustion – it is a method of heating specific acupuncture points on the body by burning an herb material close to the skin. This technique can be used alone or in combination with acupuncture.

Infra-Red - We can also heat the needles by putting Infra-Red Radiation above the area that is treated by Acupuncture.

Manipulation of needles in different directions, as well as clockwise and counterclockwise rotations are other ways for extra stimulation of needles.

Laser acupuncture - Laser stimulates acupuncture points without the use of needles.

You have to notice that every stimulating method have their indications and contraindications that should be regarded by the Acupuncturist.

Locations for Acupuncture Practice

The needles of Acupuncture are inserted into acupuncture points or Acupoints. Acupuncture points are particular sensitive points and anatomically defined areas on the skin relative to certain landmarks on the body. The original Chinese pictographs for acupoints indicated that there were holes in the skin through which qi energy could flow. These acupoints can be reliably detected with electro-dermal measurements. A dull, deep, aching feeling called “De Qi” often accompanies the stimulation of body acupuncture points.

Acupuncture points lie on channels called Meridians. The Chinese term for meridian is "jing luo." Most acupuncture and acupressure points lie on a meridian and stimulating these points using acupuncture needles, acupressure, moxibustion, or tuina is thought to help correct and rebalance the flow of energy. There are over 300 acupuncture points on the meridian system which you can

see on Charts² of Meridians and Acupuncture points. The meridian system also called channel network is a concept in traditional Chinese medicine (TCM) about a path through which the life-energy known as "qi" flows. In meridian system or meridian based acupuncture, there are 12 standard and 8 extraordinary meridians.

12 standard meridians

The 12 standard meridians, also called Principal Meridians, are divided into Yin and Yang groups. The Yin meridians of the arm are Lung, Heart, and Pericardium. The Yang meridians of the arm are Large Intestine, Small Intestine, and Triple Burner (San Jiao). The Yin Meridians of the leg are Spleen, Kidney, and Liver. The Yang meridians of the leg are Stomach, Bladder, and Gall Bladder.

Eight extraordinary meridians

The eight extraordinary meridians are different to the standard twelve organ meridians in that they are considered to be storage vessels or reservoirs of energy and are not associated directly with the Zang Fu, i.e. internal organs. The eight extraordinary vessels are:

1. Conception Vessel (Ren Mai)
2. Governing Vessel (Du Mai)
3. Penetrating Vessel (Chong Mai)
4. Girdle Vessel (Dai Mai)
5. Yin linking vessel (Yin Wei Mai)
6. Yang linking vessel (Yang Wei Mai)
7. Yin Heel Vessel (Yin Qiao Mai)
8. Yang Heel Vessel (Yang Qiao Mai)

Acupuncture in Physiotherapy³

In a pain killing outlook, Acupuncture is defined as one of the many skills used within *Physiotherapy* as an integrated approach to the management of pain and inflammation and as a means of stimulating the body's own healing chemicals in order to aid recovery and enhance rehabilitation. The body has the ability to self-repair; the use of Acupuncture, Acupressure or Electro-Acupuncture enhances the repair mechanism and enables an improved recovery time. This allows other physiotherapy treatments such as exercise, muscle strengthening and rehabilitation to achieve more effective results.

Acupuncture is used by Physiotherapists as a means of enhancing pain modulation via the stimulation of the brain and spinal cord to produce NATURAL pain relieving chemicals, such as endorphins; melatonin to promote sleep, serotonin to promote well-being, so to improve the quality of life. These assist the body's healing process and offer pain relief as a precursor for other manual or exercise therapy.

². More details are found in the next chapters

². Adapted from Acupuncture Association of Chartered Physiotherapists, UK / <https://www.aacp.org.uk/>

Among different methods of Acupuncture, Electro-Acupuncture is the most applying method in Physiotherapy so as inserted needles can be coupled to the electrodes of an electro-acupuncture apparatus. These units are designed to deliver variable amplitudes and frequencies of electrical impulses. Low frequency electro-acupuncture is intended to contribute to the mechanism of pain reduction, especially stimulating chemicals from the brain which will aid analgesia, relaxation and sleep. It is particularly useful in the more chronic pain problems that a Physiotherapist may use TENS machines over specific acupuncture points in order to help this mechanism and enhance the pain modulation.

In addition, Electro-therapy can be utilized in Dry Needling sessions by inserting needles into active trigger points of affected muscles and electrically stimulate them. Dry Needling is a **Western Modern Acupuncture** approach specific to Physiotherapy to release myofascial trigger points that Physiotherapists can practice along with **Oriental Traditional Acupuncture** to relieve musculoskeletal pains.

Types of Acupuncture

To treat different conditions, there are many approaches that Acupuncturists can practice based on the patients' needs. Some of these methods are:

- Dry Needling
- Chinese Acupuncture (Meridian Based Acupuncture)
- Scalp Acupuncture
- Auricular therapy (Ear Acupuncture)
- Ocular Acupuncture (Eye Acupuncture)
- Face Acupuncture
- Abdominal Acupuncture
- Sujok Therapy (Hand / Foot Acupuncture)
- Master Tung Acupuncture

In the next chapters, we learn about the different types of acupuncture in detail and how every particular type can treat Headaches. Among various styles of acupuncture, Dry Needling as a modern western approach is very effective to relieve headaches and has a totally different mechanism in comparison to traditional Chinese Acupuncture. Therefore, it is necessary to know the difference between Western and Oriental Acupuncture (Dry Needling and Chinese Acupuncture).

Difference between Western and Oriental Acupuncture

(Dry Needling and Chinese Acupuncture)

Acupuncture is a complementary medical practice rooted in traditional Chinese medicine that entails stimulating certain points on the body – most often with a needle penetrating the skin – to alleviate pain or to help treat various health conditions.

Dry needling is a technique employed by physical therapists and is similar in that a needle is inserted into the skin to alleviate pain. However, the primary difference between acupuncture and dry needling is that acupuncture treats for the purpose of altering the flow of Qi (vital energy) along traditional Chinese meridians while dry needling follows evidence-based guidelines, recommended “point” locations (Myofascial Trigger Points), and dosages for the treatment of specific conditions.

Physical therapists use dry needling with the goals of addressing neuromuscular conditions, relieving pain, and/or improving range of motion. Evidence to date supports that dry needling improves pain control, reduces muscle tension and normalizes dysfunctions of the motor end plates, the sites at which nerve impulses are transmitted to muscles. This can help speed up the patient's return to active rehabilitation.

Therefore, dry needling and acupuncture, while they use the same needle types, are two very different treatments. Dry needling is a therapeutic technique where a trained physical therapist inserts small, sterile, solid filament needles into the skin and muscle directly at a trigger point. The ultimate goal is to generate a “twitch response” which helps release the tension and pain located in the muscles. On the other hand, acupuncture involves the insertion of these thin needles through the skin at strategic points of the body. It is a key component of Traditional Chinese medicine that is believed to adjust and alter the body’s energy flow into healthier patterns.

In the next chapter, we learn briefly the theories and the basic concepts of all methods of acupuncture, effective in relieving headaches.

CHAPTER 2

CURRENT APPROACHES OF ACUPUNCTURE

FOR

HEADACHE TREATMENT

As studied in the previous chapter, acupuncture has many categories that can be utilized to treat various conditions including headaches. In this chapter, we study the outline of the fundamentals of all methods of acupuncture, applicable for alleviating headaches.

DRY NEEDLING

What is dry needling?

Dry needling is a therapeutic technique in which a trained physical therapist inserts small, sterile solid filament needles into the skin and muscle directly at a trigger point. This generates a twitch response, helping release muscle tension and pain. The goal is to release or inactivate the trigger points and relieve pain.

What is a trigger point?

Trigger points consist of multiple contraction knots within a muscle, and they can develop due to injury, dysfunction and overuse. Active trigger points impair a person's ability to lengthen, strengthen or contract the muscle. As a result, the muscle shortens and compresses the structure around it, causing pain.

How does dry needling work?

The exact mechanisms of dry needling are not known, however, we do know that there are both mechanical and biochemical effects. Pioneering studies by Dr. Jay Shah and his colleagues at the National Institutes of Health have shown that inserting a needle into trigger points can cause favorable change that can assist in reducing chronic pain issues. It is essential to elicit local twitch responses, which are spinal cord reflexes. Getting local twitch responses with dry needling is the first step in breaking the pain cycle.

What types of problems can be treated with dry needling?

Dry needling can be used to treat a variety of musculoskeletal issues. Muscles are thought to be a primary contributing factor to the symptoms. Such conditions include, but are not limited to neck, back and shoulder pain, arm pain (tennis elbow, carpal tunnel, and golfer's elbow), headaches (migraines and tension-type), jaw and dental pain, buttock and leg pain (sciatica, hamstring strains, calf tightness/spasms). The treatment of muscles has the greatest effect on reducing pain mechanisms in the nervous system.

Contraindications and precautions

Absolute contraindications

DN therapy is contraindicated and should be avoided in patients under the following circumstances:

- In a patient with needle phobia
- Unwilling or fearing patients
- Unable to give consent due to communicative, cognitive or age-related factors
- Medical emergency or acute medical condition
- Over an area or limb with lymphedema as this may increase the risk of infection /cellulitis and the difficulty of fighting the infection

Relative Contraindications

- Abnormal bleeding tendency
- Compromised immune system (Immunodeficiency)
- Vascular disease
- Diabetes
- Pregnancy
- Children
- Frail patients
- Patients with epilepsy
- Psychological status
- Patient allergies

Tension Type and Cervicogenic Headaches and the Role of Dry Needling

According to the 2013 Global Burden of Disease study, recurrent tension-type headache is the second most common chronic disease worldwide. Although high prevalence of chronic tension-type headache (CTTH) has been reported in all world regions, it is also one of the most frequently neglected disorders, and it leads to headaches that are difficult to treat. It receives much less attention from healthcare professionals and researchers than migraine does.

The pathogenesis of CTTH is still unclear; peripheral myofascial mechanisms (myofascial nociception) and central mechanisms (sensitization and inadequate endogenous pain control) are implicated to have a potential relationship with the condition.-Myofascial pain may play an

important etiologic role. It has been claimed that pain from the pericranial head, neck, and shoulder muscles is associated with the head and experienced as headache. Simons et al described the referred pain pattern as different myofascial trigger points (TrPs) in the head and neck muscles, which produce pain characteristics that are usually found in patients. Active TrPs are a cause of referred pain, whereas latent TrPs may not be the source of pain. Within the cervical musculature, there are several head and neck muscles, for example, temporal, masseter, upper trapezius, sternocleidomastoid, temporalis, sub-occipital muscles, from which TrPs spread referred pain to the head.

There are several pharmacological and non-pharmacological therapies for patients with CTTH. Non-pharmacological therapies include behavior treatments, physiotherapy interventions, and acupuncture. Physiotherapy is the most commonly used non-pharmacological treatment for CTTH. Methods such as postural control, relaxation, exercise programs, hot and cold packs, ultrasound, mobilization and manipulation, electromyographic biofeedback, and electrical stimulation are used for the management of patients with CTTH. However, Trigger point dry needling in patients with chronic tension-type headache is effective and safe in reducing headache intensity, frequency and duration, and increasing health-related quality of life. Therefore, physiotherapists have been using dry needling (DN) for a long time to address the pain and dysfunction associated with myofascial TrPs, especially for neck and head regions.

Because TrPs appear to play an important role in migraine and tension-type headaches, all headache patients should be evaluated for their presence. If found, the treatment regimen should include myofascial TrP pain reduction techniques or a myofascial TrP pain management program. The same treatment strategies used for myofascial TrP pain work well for the reduction of headache, whether migraine or tensiontype, when associated with "pericranial muscle tenderness" (myofascial TrPs).

In a series of blinded-controlled studies, Fernández-de-las-Peñas et al. found that active TrPs were extremely prevalent in individuals with chronic and episodic TTH (Tension Type Headache). Patients with chronic TTH have active TrPs in the extra-ocular superior oblique muscles, the sub-occipital muscles, the upper trapezius, temporalis, sternocleidomastoid, and extra-ocular rectus lateralis muscles. Additionally, patients with chronic TTH and active TrPs in these muscles exhibited more severe headaches with greater intensity, frequency, and duration than patients with chronic TTH and latent TrPs in the same muscles.

One should keep in mind that TrPs primarily cause increased muscle tension (tonus) that limits stretch range. Also, TrPs can produce inhibition of muscle function. The overall goal of treatment is to restore normal function. All of the head and most of the neck muscles, including the sternocleidomastoid, trapezius, digastric and other anterior neck muscles, sub-occipital, and cervical para-spinal muscles are concerned with Headaches and Neck pains. Levator scapulae and Scalene muscles are exclusions because they refer pain downward, but these are still important muscles to consider when treating head and neck pain complaints.

Regional Trigger Points for Head, Neck and Facial Pain

The Pain resulted from myofascial trigger points of the muscles in the uppermost of the body may be referred to Head, Neck and Face. (Fig 2-1)

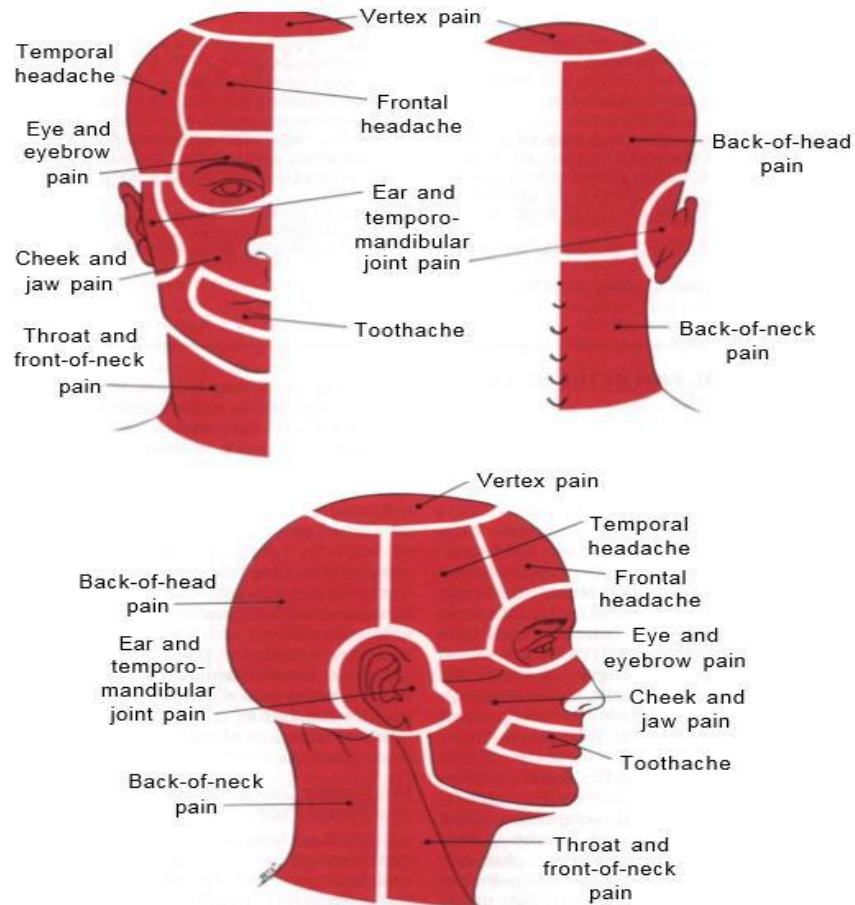


Figure 2-1. Areas in the head and neck region to which pain may be referred by myofascial trigger points

- PAIN GUIDE

VERTEX (Top of Head) PAIN: Sternocleidomastoid (sternal), Splenius capitis.

FRONTAL and SINUS Area HEADACHE: Frontalis, Temporalis, Corrugator supercili, Procerus, Orbicularis oculi, Zygomaticus major, lateral pterygoid, Sternocleidomastoid (sternal / clavicular), Semispinalis capitis.

TEMPORAL HEADACHE: Trapezius, Sternocleidomastoid (sternal), Temporalis, Splenius cervicis, Sub-occipital group, Semispinalis capitis, Lateral pterygoid.

BACK-OF-HEAD PAIN: Trapezius, Sternocleidomastoid (sternal / clavicular), Semispinalis capitis, Semispinalis cervicis, Splenius cervicis, Sub-occipital group, Occipitalis, Digastric, Temporalis, Cervical Multifidus.

BACK-OF-NECK PAIN: Trapezius, Cervical Multifidus, Erector spine group, Levator scapulae, Splenius cervicis, Infrapinatus.

THROAT AND FRONT-OF-NECK PAIN: Sternocleidomastoid (sternal), Digastric, Medial pterygoid.

LATERAL-NECK PAIN: Sternocleidomastoid (clavicular), Levator scapulae, Digastric, Medial pterygoid, Upper Trapezius.

EAR AND TEMPOROMANDIBULAR JOINT PAIN: Upper trapezius, Splenius cervicis, cervical erector spine, Sternocleidomastoid (clavicular), Temporalis, Masseter (deep), Lateral and Medial pterygoids.

CHEEK AND JAW PAIN: Sternocleidomastoid (sternal), Upper Trapezius, Masseter (superficial / deep), Digastric, Buccinators, Platysma, Orbicularis oculi, Lateral and Medial pterygoids, Zygomaticus major.

EYE AND EYEBROW PAIN: Sternocleidomastoid (sternal), Temporalis, Splenius cervicis, Semispinalis Capitis and Cervicis, Masseter (superficial), Sub-occipital group, Occipitalis, Frontalis, Corrugator supercilii, Orbicularis oculi, Zygomatic muscle, and Trapezius.

TOOTHACHE: Temporalis, Masseter (superficial), Zygomatic, Medial Pterygoid, Digastric (anterior).

As Dry Needling is one of the two main approaches that will be discussed in this essay, the effects and the techniques of Dry Needling for the muscles that cause Headaches and Neck Pains will be described in the later sections.

CHINESE ACUPUNCTURE

(MERIDIAN BASED ACUPUNCTURE)

Acupuncture involves the insertion of very thin needles through the skin at particular points on your body. A key component of traditional Chinese medicine, acupuncture is most commonly used to treat muscle spasms and pain, headaches, stress and depression, insomnia, cognitive decline, gynecological problems, allergies, digestive problems, respiratory disorders, and overall wellness.

Traditional Chinese medicine explains acupuncture as a technique for balancing the flow of energy or life force — known as chi or qi — believed to flow through pathways (meridians) in the body. By inserting needles into specific points along these meridians, acupuncture practitioners believe that the energy flow will re balance.

In contrast, many Western practitioners view the acupuncture points as places to stimulate nerves, muscles and connective tissue. This results in the body producing natural substances, such as pain-relieving endorphins. It's likely that these naturally released substances are responsible for the beneficial effects experienced with acupuncture.

Whereas the bases of Acupuncture rules are upon the theories of Traditional Chinese Medicine, any acupuncturist should have a good knowledge of basic concepts and theories of Traditional Chinese Medicine. Thus, in the following we are getting to know the fundamentals of Traditional Chinese Medicine and the Acupuncture itself.

What is Traditional Chinese Medicine (TCM)?⁴

Traditional Chinese Medicine (TCM) is one of the oldest forms of medicine, dating back over 5,000 years. Practitioners of TCM most commonly use acupuncture and herbs to treat patients, but there are a number of different modalities for treating various syndromes.

Some of the key principles that further describe the TCM approach include:

Qi

Qi refers to the energy or life force that flows throughout the meridians. Practitioners believe that when the energy is stagnant or the quality of qi is insufficient, health issues such as anxiety, depression, emotional stress, disease, or illness may occur.

² Theories of TCM in this chapter are adapted from the following sources:

- a. Maciocia, G. (3rd Ed.) (2015). *the Foundations of Chinese Medicine: A Comprehensive Text*. Elsevier Ltd.
- b. World Health Organization (2010) . *Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in traditional Chinese medicine*. World Health Organization.
- c. Maciocia, G. (2008). (2nd Ed.). *The Practice of Chinese Medicine: The Treatment of Diseases with Acupuncture and Chinese Herbs*. NY: Churchill Livingstone Elsevier.
- d. Jin, Guan-Yuan. (2007). *Contemporary Medical Acupuncture: A Systems Approach*. USA: Higher. Education Press.

8 Principles of TCM

In TCM, the 8 principles are a general method for diagnosing and describing the location and nature of the body's imbalance. Categories include: yin/yang; heat/cold; interior/exterior; and excess/deficiency.

1. Yin / Yang

Yin and Yang are defined as two opposite forces or energies that exist interdependently in nature to create a greater whole. (Fig 2-2)

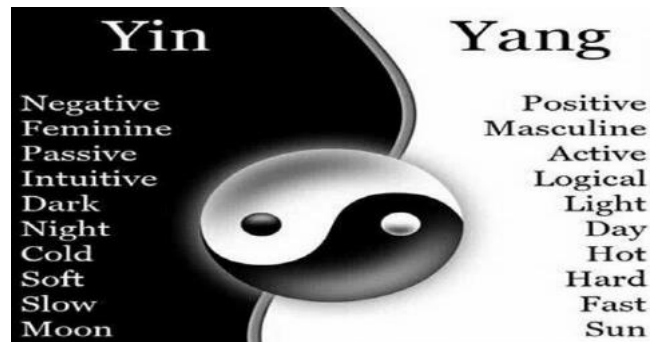


Fig 2-2. A chart of different yin-yang relationships

2. Heat / Cold

In Chinese Medicine "cold" symptoms include sneezing, runny nose with clear or white phlegm, itchy throat and coughing up clear or white mucus. If you have them, Chinese Medicine says the pathogen is "wind-cold." "Heat" symptoms include sore throat, fever, thirst, nasal congestion with yellow phlegm.

3. Interior / Exterior

Interior describes diseases that manifest themselves in the internal organs, such as qi, blood, and bone marrow. Exterior describes diseases that manifest themselves on surface of the body, such as hair, skin, nails, and meridians.

4. Excess / Deficiency

Deficiency is used to describe a vacuity in *qi*, blood (*Xue*), or body fluids (*Jinye*). It can manifest as constipation, having a small appetite, dizziness, and slow pulse. Excess is generally classified as any disease that can't be identified as a Deficiency. It can manifest as quick pulse, sweaty palms, and sharp stomach pains.

The Five Elements

The Five Elements theory posits wood, fire, earth, metal, and water as the basic elements of the material world. These elements are in constant movement and change. In traditional Chinese medicine Five Elements theory is used to interpret the relationship between the physiology and pathology of the human body and the natural environment.

1. Wood

Wood elements tend to be “workaholics”, over-achievers, always planning and executing, striving for improvement and success.

2. Earth

Earth types value loyalty and security. They admire to feel grounded and at home. An excess of the earth element can lead to worry, overthinking and health problems.

3. Water

Water personalities are very adaptable. They are wise, descending, sensible, creative and modest.

4. Fire

Fire types can be described by these characteristics: joy, romance, fun, energy, passion and creativity. But they also tend to be aggressive, easily worried, depressed and isolated.

5. Metal

Metal type personalities are calm and strong, responsible, motivated, loyal, disciplined and have a strong self-esteem. But they are also impatient, stubborn, critical and self-centered.

The Vital Substances

The Five Vital or Fundamental Substances in a person include *Jing* (Essence), *Xue* (Blood), *Jinye* (Body Fluids), *Qi*, and *Shen* (Spirit). Each vital substance is associated with a particular form and function in the body.

Jing (essence) is the most concentrated form of yin Qi in the body and responsible for all growth and development. **Xue (blood)** nourishes and refreshes the body and mind. **Jin ye (fluids)** provide moisture and lubrication. **Qi** is responsible for the bodily functions of metabolism, digestion and transformation, warming, strength and movement. **Shen (spirit / mind)** is the most yang aspect of Qi in the body and is the energy of perception, thought, and understanding.

Internal Organs

Yin (Zang) and Yang (Fu) Organs

The *Zang-fu* is collection organs that produce and regulate *qi* within the body. In total, there are 12 organs, six *Zang* and six *fu*.

Zang organs referring to the organs considered to be **yin** in nature, include the heart, lungs, kidneys, liver, and spleen. While **Fu organs** referring to the **yang** organs include the gallbladder, large intestine, small intestine, urinary bladder, and the san jiao (the triple system).

The Functions of the Internal Organs

- The Functions of Yin organs

Heart is responsible for storing *shen*. The primary function of the **liver** is to ensure that *qi* can flow freely through the meridians. The primary function of the **lung** is the *actuation* of pectoral *qi*, which is produced by breathing. The **spleen** is in charge with digestion, blood coagulation and fluid metabolism. The **kidney's** primary function is storing and controlling 'essence', or *jing*. The **Pericardium** has a powerful influence on the patient's mental and emotional states.

- The Functions of Yang organs

The **Stomach** is paired with the Spleen. If Stomach *qi* is weak, food stagnates and digestive problems will develop. **Small Intestine** receives food and fluids from the Stomach, after the Stomach has "rotted and ripened" and after the Spleen has extracted the food essences. **Large Intestine's** primary function is to receive waste material from the small intestine and to absorb any remaining good fluids while transforming the remaining waste into feces. **Gall Bladder's** main function is to store bile produced by the liver and continuously excrete it to the intestines to help digestion. The **Urinary Bladder** is paired with the Kidneys and stores and excretes urine. **Triple Burner:** The Triple Burner (San Jiao) is paired with the Pericardium, which encases the Heart.

THE CAUSES OF DISEASE

- **Internal Causes of Disease:** Wind, Cold, Damp, Heat, Summer Heat and Dryness
- **External Causes of Disease:** Anger, Joy, Sadness, Worry, Pensiveness, Fear and Shock
- **Miscellaneous Causes of Disease:** Constitutional Factors, Exercise, Diet and Lifestyle

Imbalance / Disharmony: Health is maintained when interactions between Vital Substances, Zang Fu Organs, and Meridians are in harmony and all bodily functions are working well. If interactions are disrupted or a dysfunction occurs, imbalance occurs and disease results.

Patterns of Disharmony: Blood Stasis, Wind-cold Attack, Liver Yang Rising, Liver Qi Stagnation, Heart Blood Deficiency, Heart-qi Deficiency, Heart-Yang Deficiency and Heart-Yin Deficiency. There are also patterns of Blood stasis, Qi stagnation, Qi Deficiency, and Yin-Yang Deficiency for all other organs.

PATHOLOGY IN TCM

- The Pathology of Full and Empty Conditions
- The Pathology of Yin–Yang Imbalance

Diagnosis in TCM

The theory of diagnosis in TCM is very extensive and complicated in details. The discussion of diagnosis in this essay will be just limited to listing of the diagnosis methods in following categories:

Diagnosis by observation

- Mouth and lips
- Teeth and gums
- Throat
- Limbs
- Skin
- Tongue
- Channels
- Spirit
- Body
- Body movement
- Head and face
- Eyes
- Nose
- Ears

Diagnosis by interrogation

- Sweating
- Ears and eyes
- Feeling of cold, feeling of heat and fever
- Emotional symptoms
- Sexual symptoms
- Women's symptoms
- Children's symptoms
- Pain
- Food and taste
- Stools and urine
- Thirst and drink
- Energy levels
- Head, face and body
- Chest and abdomen
- Limbs
- Sleep

Diagnosis by palpation

- Chest
- Abdomen
- Points
- Pulse
- Skin
- Limbs

Diagnosis by hearing

- Hiccup
- Borborygmi
- Sighing
- Belching
- Voice
- Breathing
- Cough
- Vomiting

Diagnosis by smelling

- Breath
- Sweat
- Body odor
- Odor of bodily secretions

- Vaginal discharge and lochia
- Intestinal gas
- Sputum
- Urine and stools

Meridians (Pathways for Qi / Vital Energy)⁵

In traditional Chinese medicine, meridians are invisible energy pathways or channels that run through the body. Our vital life energy, or "qi," is thought to flow along these meridians, and anything that disrupts the smooth flow of chi is said to cause illness. The Chinese term for meridian is "jing luo." Most acupuncture and acupressure points lie on a meridian and stimulating these points using acupuncture needles, acupressure, moxibustion, or tuina is thought to help correct and rebalance the flow of energy. There are about 400 acupuncture points on the meridian system.

STANDARD MERIDIANS

There are 12 regular meridians and 20 meridians in total in TCM. Each regular meridian is believed to correspond to an organ and run along the body to either the hand or the foot. The Yin meridians of the arm are Lung, Heart, and Pericardium. The Yang meridians of the arm are Large Intestine, Small Intestine, and Triple Burner. The Yin Meridians of the leg are Spleen, Kidney, and Liver. The Yang meridians of the leg are Stomach, Bladder, and Gall Bladder.

³. Theories of Meridians and Acupuncture points in this chapter are adapted from the following sources:

- a. Stux, G., & pomeranz, B. (1997). (4th Revised Ed.). *Basics of Acupuncture*. Springer.
- b. Focks, C. (2008). *Atlas of Acupuncture*. Elsevier Ltd.
- c. Ching, N. (2017). *The Fundamentals of Acupuncture*. Philadelphia: Jessica Kingsley Publishers.
- d. Mole, P. (2007). *Acupuncture for Body, Mind and Spirit*. Oxford: Spring Hill.
- e. Ross, J. (2004). *Acupuncture Point Combinations: The Key to Clinical Success*. Churchill Livingstone Elsevier.
- f. Junying, G., Wenquan, H. & Yongping, S. (1995). *Selecting the Right Acupoints: A Handbook on Acupuncture Therapy*.
- g. *Atlas of Acupuncture Points: Point Locations* (2007).
- h. Beijing College of Traditional Chinese Medicine (1995). *Essentials of Chinese Acupuncture*. Beijing: Foreign Language Press.

The Main Meridian Channels

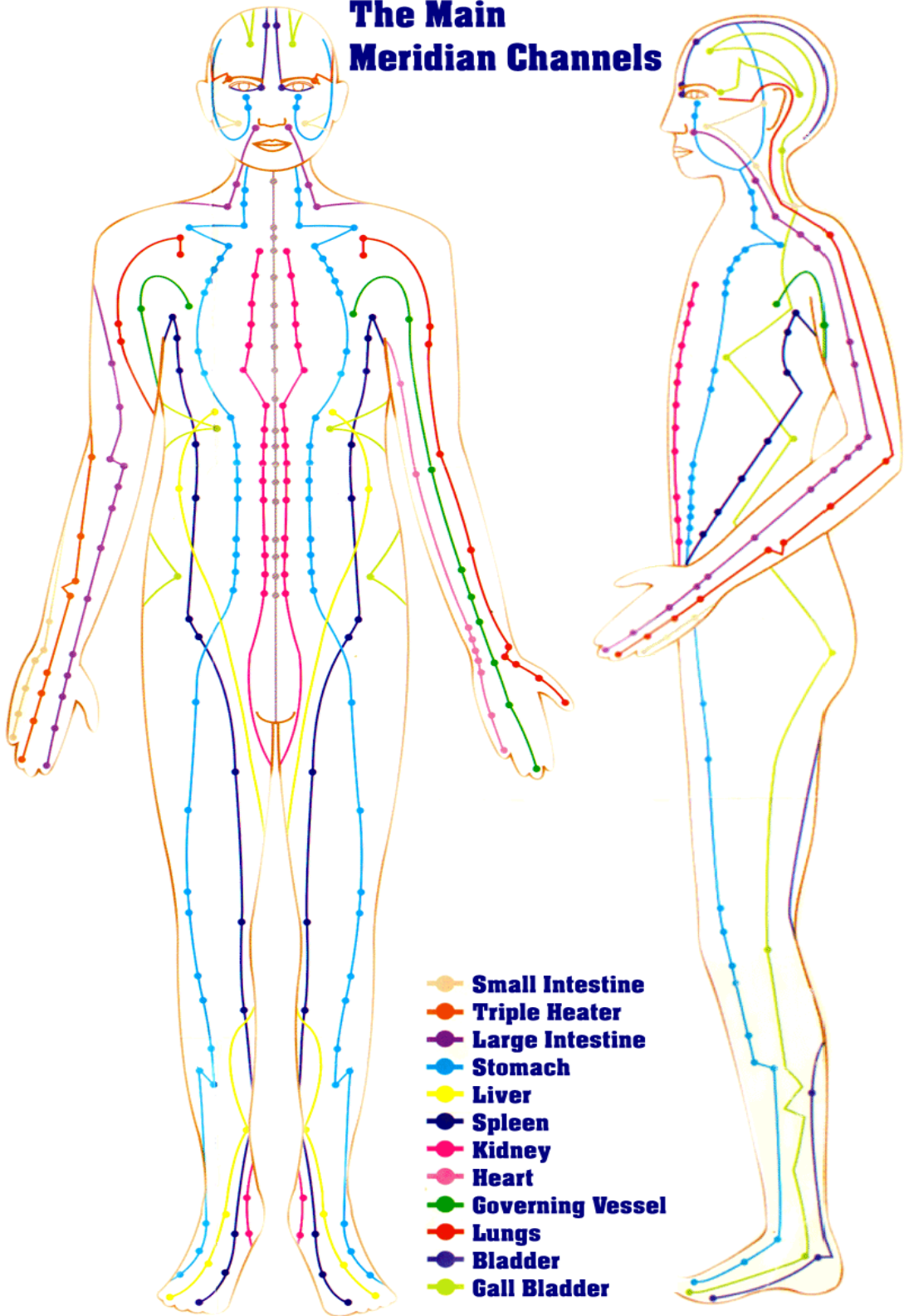


Fig 2-3. The chart of Acupuncture Meridians

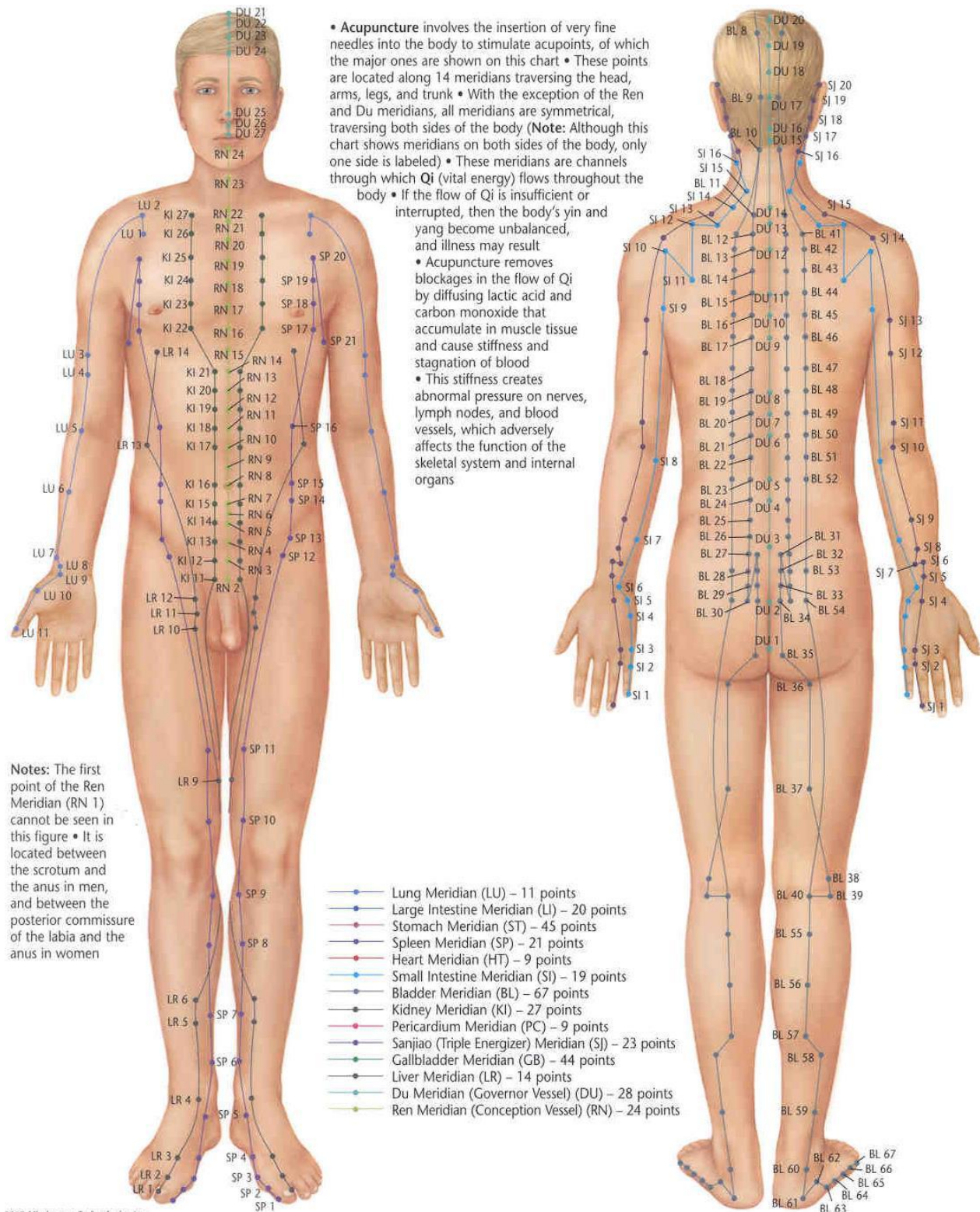


Fig 2-4. The chart of Acupuncture points

LUNG MERIDIAN (LU)

The Lung is a yin meridian and controls breath and energy. It is paired with the Large Intestine Yang Meridian. The Hand Tai-Yin of the Lung has 11 points (LU1 to LU11).

Symptoms of Lung Meridian: Pain in shoulders, back and supraclavicular fossa; aversion to cold; Pain along course of meridian, e.g. tennis elbow, stiff forearm; Wrist disorders, carpal tunnel syndrome; Disorders of throat, trachea, vocal chords and voice; Shortness of breath, spontaneous sweating, bronchitis, asthma, chest tightness, palpitations and emphysema; Diaphragmatic tightness; Frequent urination, incontinence, edema; Diarrhea, constipation.

LARGE INTESTINE MERIDIAN (LI)

The Large Intestine is a yang Meridian that is paired with the Lung Yin Meridian. The Hand Yang-Ming of the Large Intestine has 20 points (LI1 to LI20).

Symptoms of Large Intestine Meridian: Neck stiffness and swelling; Pain in shoulder, bursitis, arm, tennis elbow and index finger; Sinusitis, epistaxis, toothache, red, painful eyes and throat, facial paralysis, rashes, itching and hyperpigmentation; Intestinal disorders, abdominal pain and swelling, borborygmus, flatulence, diarrhea; Epigastric pain, vomiting, facial edema, constipation, belching; associated Lung complaints; asthma, bronchitis, cough.

STOMACH MERIDIAN (ST)

The Stomach is a yang Meridian that is paired with the Spleen Yin Meridian. The Foot Yang-Ming of the Stomach has 45 points (ST1 to ST45).

Symptoms of Stomach Meridian: Dry nose, frontal headache, red face and eyes, lip and mouth ulcers, herpes, mouth deviation, painful throat, swollen neck, toothache; Muscle spasms, thigh and knee pain; Swollen breast, fibrocystic breasts, epistaxis; Manic depression; Gastrointestinal complaints, frequent hunger, gastritis, borborygmus (rumbling in the stomach caused by intestinal gas); Stomach complaints, ulcers, nausea, vomiting, diarrhea, constipation.

SPLEEN MERIDIAN (SP)

The Spleen is a Yin Meridian that is paired with the Stomach Yang Meridian. The Foot Tai-Yin of the Spleen has 21 points (SP1 to SP21)

Symptoms of Spleen Meridian: Atrophy of the muscles and extremities; Medial leg, knee and thigh pain; Swelling of legs, feet and joints; General fatigue, especially in the limbs; Bunions; Epigastric pain below the Heart, loose stools, borborygmus, vomiting, nausea, abdominal fullness and distention; Edema, excess phlegm, leucorrhea; Facial puffiness, pain in cheek and jaw; Stiffness of tongue, impaired speech.

HEART MERIDIAN (HT, HE)

The Heart is a yin Meridian that is paired with the Small Intestine Yang Meridian. The Hand Shao-Yin of the Heart has 9 points (He1 to He9).

Symptoms of Heart Meridian

- Heart disease, cardiac arrhythmia, sensation of chills in the heart.
- Cardiac pain, pain in chest/ribs/sides; Axilla, shoulder, arm, elbow, wrist and little finger pain, spasm and Joint restriction in these areas.
- Brachial and ulnar nerve neuralgia; Swelling of arm & forearm; Hot palms / Cold Palm (Heat & Cold in the meridian direction); Arm numbness; Hand tremor.
- Depression, insomnia, psychosis, hysteria, memory loss, laments and sighs often, misanthropy, neurasthenia
- Epilepsy, paralysis of four limbs, hiccoughs, Palpitations, fever with chills.
- Headaches, stiff neck, toothache; Lack of energy, frequent yawning, dizziness; Night sweats, thirst, hot face without sweating; Aphasia and sudden loss of voice.

SMALL INTESTINE MERIDIAN (SI)

The Small Intestine is a yang Meridian that is paired with the Heart Yin Meridian. The Hand Tai-Yang of the Small Intestine has 19 points (SI1 to SI19).

Symptoms of Small Intestine Meridian: Pain and stiffness of lateral side of hands and little finger; Swelling, stiffness and pain of cervical region, scapula, shoulders; Painful, swollen mandible, temporomandibular joint (TMJ); Deafness, tinnitus, swollen lymph glands, sore throat; Tongue sores; Fever, night sweats; Red, painful eyes, yellow sclera; Yellow urination, urine retention, edema; Diarrhea, constipation, abdominal pain and distention; Inguinal hernia, distending pain in lower abdomen referring to the back.

BLADDER MERIDIAN (BL, UB)

The Bladder is a yang Meridian that is paired with the Kidney Yin Meridian. The Foot Tai-Yang of the Bladder has 67 points (UB1 to UB67).

Symptoms of Bladder Foot Tai-Yang Meridian: Pain and stiffness along spine, hip, knee, leg, foot, small toe; Headaches, nape of neck stiffness, chills, fever, runny nose, body aches; Nosebleed, head cold, clogged sinuses; Yellow sclera, painful eyes with tearing, epistaxis, sinusitis; Urine retention, distention/pain in lower abdomen; Dysmenorrhea, leucorrhea; Worry, phobias, fears.

KIDNEY MERIDIAN (KID)

The Kidney is a yin Meridian that is paired with the Bladder Yang Meridian. The Foot Shao-Yin of the Kidney has 27 points (KID1 to KID27).

Symptoms of Kidney Meridian: Degenerative bone and joint disorders; Pain and weakness in lower back, back of knees, spine, hip, lower extremities; Infertility, impotence, poor memory; Edema, puffy face, dark circles and puffiness under the eyes; Chronic diarrhea/constipation, vomiting, nausea, hunger, but no desire to eat; Dry mouth, tongue and chronic sore throat; Blurred vision, dizziness; Insomnia, somnolence, palpitations, shortness of breath; Fear, anxiety.

PERICARDIUM MERIDIAN (P, PC)

The *pericardium* is a *yin* meridian that is *paired with* the Triple Burner (San Jiao) yang meridian. The Hand Jue-Yin of the Pericardium has 9 points (P1 to P9).

Symptoms of Pericardium Meridian: Swollen, painful axillary fold; Spasms of elbow and forearm, hands, feet; fullness in chest and hypochondria; Palpitations, cardiac pain, restlessness, stuffy chest; Mental issues; depression, anxiety, syncope, manic depression; Yellow sclera, aphasia, red eyes.

TRIPLE WARMER (SAN JIAO) MERIDIAN (TW, TB, SJ)

The San Jiao is a Yang Meridian that is paired with the Pericardium Yin Meridian. The Hand Shao-Yang of the San Jiao has 23 points (SJ1 to SJ23).

Symptoms of the San Jiao Meridian

- Pain, spasm and limitation of the shoulder and arm; numbness of the fingers.
- Headaches, migraine, neck rigidity.
- Common cold, high fever, dizziness, sore throat, sudden loss of voice.
- Redness, swelling and pain of the eye; yellowness of the eyes; twitching of the eyelid; cataract.
- Facial paralysis, deafness, Tinnitus, toothache.
- Hiccups, constipation

GALL BLADDER MERIDIAN (GB)

The Gall Bladder is a yang Meridian that is paired with the Liver Yin Meridian. The Foot Shao-Yang of the Gall bladder has 44 points (GB1 to GB44).

Symptoms of the Gall Bladder Meridian: Numbness, Coldness, pain and spasm of the lower extremities; Ear problems, tinnitus, deafness; Headaches, Migraine, pain and stiffness of the neck; Redness, swelling and pain of the eye, blurred vision, night blindness, glaucoma, cataract; Facial distortion, lockjaw, toothache; Nasal congestion, Common cold, sore throat, cough; Abdominal pain, amenorrhea, irregular menstruation; Bitter taste in the mouth, vomiting, acid regurgitating, constipation; Depression, insomnia.

LIVER MERIDIAN (LIV)

The Liver is a yin Meridian that is paired with the Gall Bladder Yang Meridian. The Foot Jue-Yin of the Liver has 14 points (LIV1 to LIV14).

Symptoms of the Liver Meridian

- Bitter taste in the mouth, vomiting, hiccups, stomach ache, diarrhea.
- Lower abdominal pain, low back pain, hernia, pain in the external genitalia, swelling and pain in the knee.

- Redness and swelling pain of eyes, glaucoma, nearsightedness.
- Painful and unsmooth urination, dysuria, prolapse of the uterus, irregular menstruation.
- Headache, vertigo, facial paralysis, epilepsy, insomnia.

In addition to the 12 regular meridians, *Eight Extraordinary Meridians*⁶ are not tied to a major organ system. Instead, they store qi and blood for the regular meridians, circulate a person's essence or "jing" and defensive qi (wei qi), and also provide further connections between the 12 meridians.

Among the eight extra meridians, the Governing Vessel ("Ren Mai") and the Conception Vessel ("Du Mai") are considered the most important meridians, partly because they contain points that are not on the 12 regular meridian lines.

CONCEPTION VESSEL MERIDIAN / REN MAI (CV, REN)

Ren means responsibility, therefore the Ren Mai is responsible to the other Yin channels. It is a junction of all Yin meridians. The Directing Channel or Ren Mai has 24 points (Ren1 to Ren24)

Symptoms of the Conception Vessel Meridian (CV, Ren)

- Irregular menstruation, menstrual cramps, prolapse of the uterus, postpartum syndrome, infertility, hot flashes, seminal emission, impotence.
- Unsmooth urination, frequent urination.
- Stomach-ache, hiccups, acid regurgitation, vomiting, dyspepsia, anorexia, constipation, diarrhea.
- Pain and swelling in abdomen / abdominal mass, lower back pain, hernia.
- Cough, asthma, chest pain, wheezing, sore throat, goiter, sudden loss of voice and difficulty swallowing.
- Fatigue, revitalization and reinvigoration,
- Depressive and manic psychosis, insomnia, epilepsy

GOVERNING VESSEL MERIDIAN / DU MAI (GV, DU)

Du meridian is a junction of all Yang meridians. The word Du means to direct/govern. The role of Du meridian is to manage all Yang channels. The Governing Channel or Du Mai Meridian has 28 points (Du1 to Du28).

⁶. The eight extraordinary meridians are; the Du (GV), the Ren (CV), the Chong, the Dai, the Yinwei, the Yangwei, the Yinqiao and the Yangqiao. These meridians have their own separate pathways and differ from the 12 main meridians. They do not pertain to any zangfu organs and they are not necessarily arranged in pairs externally.

Symptoms of the Governing Vessel Meridian (GV, DU)

- Stomachache, indigestion, poor assimilation (undigested food in stools), epigastric pain, bloating, poor appetite, diarrhea, constipation, hemorrhoids, prolapse of rectum.
- Headaches, stiff neck and spine, low back pain, hernia, pain in the coccyx and sacrum, abdominal pain.
- Panic attacks, depressive or manic psychosis, insomnia, night sweating.
- Irregular menstruation, amenorrhea, impotence.
- Amnesia, aversion to cold, fever, cough, asthma, sore throat and loss of voice, vertigo, dizziness, epilepsy.
- Sinusitis, nasal polyp, nasal obstruction, runny nose, nosebleed.

EXTRA POINTS

After the categorization of the 361 classic acupuncture points located on the 14 channels, new points were found and introduced as extra points. Every point has a Chinese name, which shows its location or function, e. g., Ex. 2 Taiyang = temple, Ex. 8 Anmian = silent sleep. Most of the extra points are not located on any of the 14 channels. Extra points are acupuncture points that are not regular channel points. The regions in which the extra points are found are abbreviated by the WHO standardization committee as follows:

- Extra points on the head and neck (Ex-HN)
- Extra points on the chest and abdomen (Ex-CA)
- Extra points on the back of the trunk (Ex-B)
- Extra points on the upper extremities (Ex-UE)
- Extra points on the lower extremities (Ex-LE)

EXTRAORDINARY MERIDIANS

The eight extraordinary meridians (Vessels) run behind the 12 main meridians so they are different to the standard organ meridians. Extraordinary meridians interconnect with the 12 meridians and correspondingly allow for broad and deep effects within the body. They are considered to be the storage vessels or reservoirs of energy and are not associated directly with the Zang Fu, i.e. internal organs. 6 of the 8 extraordinary vessels has a master and coupled point on a pair of the main meridians. The Governing Vessel and the Conception Vessel, however, have their own points. The eight extraordinary vessels are:

1. Conception Vessel (Ren Mai)
2. Governing Vessel (Du Mai)
3. Penetrating Vessel (Chong Mai)
4. Girdle Vessel (Dai Mai)
5. Yin linking vessel (Yin Wei Mai)
6. Yang linking vessel (Yang Wei Mai)
7. Yin Heel Vessel (Yin Qiao Mai)
8. Yang Heel Vessel (Yang Qiao Mai)

Categories of Acupuncture Points

Traditional Chinese Medicine utilizes a number of theories which group acupuncture points together based on their functions and/or other relationships. Many of these theories are important in a clinical setting and are used, along with other theory and diagnostic information, to decide which acupuncture points will be used for a given diagnostic pattern or condition. There are many groups of special points the description of which is beyond the discussion of this essay. *Front Mu Points / Alarm Points, Back Shu Points, Command Points, Luo-Connecting Points, Yuan- Source Points, Jing-Well Points and Four Seas Points* are some examples.

The standard for finding Acupuncture Points (Cun Measurement)

The cun is a very accurate way of measuring where acupoints exist on the body. One cun is the length of the middle phalanx of the patient's index finger or the width of their thumb. Some simple examples are:

- Two fingers width represent 1.5 cun.
- Four fingers width represent 3 cun.

Figure 2-5 shows the cun measurements.

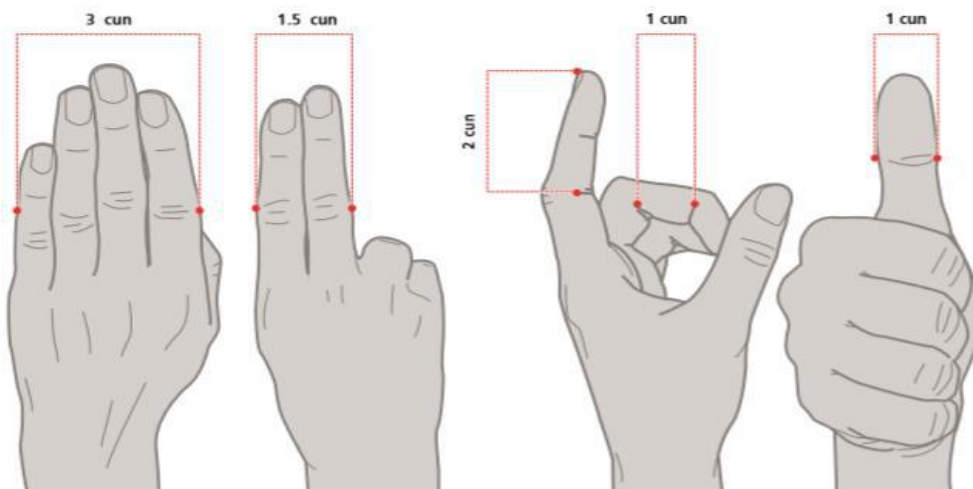


Figure 2-5. Cun Measurements

GENERAL ACUPUNCTURE FOR HEADACHES

Traditional Chinese medicine (TCM) has a very consistent and philosophically-based framework for headache etiology, physiology, and diagnosis and treatment strategy. Acupuncture, as an effective treatment modality, has been applied to headaches from the earliest beginnings of TCM.

Acupuncture is not only effective for migraine headaches, but also works very well with tension headaches, cluster headaches, post-traumatic headaches, and disease-related headaches that might be due to sinus problems, high blood pressure or sleeping disorders. The greatest advantage of acupuncture over Western medicine is that it does virtually no harm. Some medications can have serious side effects and can (in some instances) actually lead to patients experiencing a "rebound" headache. Unlike synthetic drugs, acupuncture has virtually no side effects, and the procedures for treating headaches are much less invasive with acupuncture than with surgery.

Headaches in TCM Prospect⁷

Headache is one of the most common symptoms encountered in clinical practice. There are few people who have never experienced a headache at some time or other of their life. Migraine and tension-type headaches are the common headache disorders in clinic and result in significant reduction in social activities and work capacity of sufferers. According to traditional ideas, chronic headache and migraine are attributed to a blockage of Qi in the Yang channels of the head. The blockages and therefore the pain in chronic headache are mostly caused by an internal disturbance of organs and channels and rarely by external influences caused by weather factors.

The head is the highest part of the body not only anatomically but also energetically according to the flow of Qi in the 12 channels. It is, in fact, the area of maximum potential of energy in the circulation of Qi in the channels. Qi circulates in the channels because there is a difference of energy potential between the chest and the head. The implication of all this is that the head is the area of maximum potential of Qi and therefore intrinsically prone to rising of energy (or pathogenic factors) to the top; for example, the rising of Liver-Yang, Liver-Fire, Liver-Wind or Heart-Fire. Conversely, clear Yang Qi failing to rise to the top may lead to the obstruction of the head by Phlegm or Dampness. The head is also the area of concentration of Yang energy, as all the Yang channels directly meet and join up

⁷ . The theories of Acupuncture for Headaches are adapted from the following sources:

- a. Carlsson J., Fahlcrantz A., Augustinsson, L. E. (1990). Muscle tenderness in tension headache treated with acupuncture or physiotherapy. *Cephalalgia*, 10, 131-141.
- b. Hesse J., Mogelvang B., Simonsen, H. (1994). Acupuncture versus metoprolol in migraine prophylaxis: A randomized trial of trigger point inactivation. *Journal of Internal Medicine*, 235, 451-456.
- c. Vincent, C. A. (1989). A controlled trial of the treatment of migraine by acupuncture. *The Clinical Journal of Pain*, 5, 305-312.
- d. Vincent CA. (1990). The treatment of tension headache by acupuncture: A controlled single-case design with time series analysis. *Journal of Psychosomatic Research*, 34, 553-561.
- e. Zhang, L. & Li, L. (1995). 202 cases of headache treated with electroacupuncture. *Journal of Traditional Chinese Medicine*, 15 (2), 124-126.
- f. Acupuncture Today (2020). Acupuncture for Headaches and Head Pain. Retrieved from <https://www.acupuncturetoday.com/abc/headaches.php>

in the head. In fact, as far as the superficial pathways are concerned, only Yang channels reach the head.

However, Yin Qi obviously also reaches the head but only internally. Of the Yin channels, only the Heart and Liver reach the head internally (deep pathway). All the other Yin channels reach the head indirectly via their divergent channels, as each Yin divergent channel merges with its related Yang divergent channel at the neck area. Therefore, the divergent channels are an important way in which Yin Qi reaches the head (as all Yin divergent channels eventually merge with the corresponding Yang divergent channel in the neck area). Thus both the clear Yang from the Yang organs and the pure essences from the Yin organs reach the head.

As far as headaches are concerned, the two Yang channels that are most frequently involved are the Gall Bladder and Bladder. Of the Yin channels, the two most frequently involved are the Liver and Kidneys.

Etiology

Any of the causes of disease normally considered in Chinese medicine can play a part in the etiology of headaches.

PATHOLOGY: Traditional Chinese medicine ascribes headache to a variety of factors, among them Wind, Heat, Excessive liver Yang, Phlegm, Dampness and Deficiency, especially of the Kidney Qi. As the head is an area of concentration of Yang Qi, the pathology of headaches can be reduced to four very simple and basic conditions of Excess Yang, Deficiency of Yang, Excess of Yin and Deficiency of Yin. In simple words, all headaches are simply due to either too much or too little Qi in the head: the former is an Excess-type headache, the latter a Deficiency-type. When the head is painful, it indicates a deficiency below and an excess above. On the contrary, when Qi cannot ascend, the head will ache. In many cases of chronic headache, there is a condition of simultaneous Deficiency and Excess.

Point selection⁸

In the treatment of headaches, it is essential to combine local with distal points. The more chronic or intense the headache, the more local points are required. Local points are also required when a chronic headache appears always in the same spot. This indicates a local stasis of Blood, which always calls for the use of local points to disperse it. However, the primary aim of *distal points* is to treat the pattern, while that of *local points* is to treat the channel involved. Some local points may be chosen according to the location of the headache irrespective of the pattern.

Combination of Points

There are several traditional methods of combining one point with another in an acupuncture prescription. These techniques are flexible, permitting much variation according to the particular needs of the case.

- Combining local points and distal points

⁸. You can find the exact location of the points also the needling techniques in faithful publications including those in the references of this article.

- Combining points on the front with points on the back
- Combining points on Yang channels with points on Yin channels
- Combining points above with points below
- Combining points on the left with the diseases on the right
- Combining corresponding points

Treatment on the basis of the location and radiation of pain

The location of pain is very important for the planning of an individual acupuncture treatment. According to the traditional concept of Chinese medicine, the location and radiation of pain can be divided into four major groups depending on the channels affected:

- **Shao-Yang type headaches:** Pain along the gallbladder channel, with most pain in the area of GB14 above the eyes or GB20 in the neck (Fig 2-6). Accounting for 40%-50% of headaches, the Shao-Yang type is the most frequent.

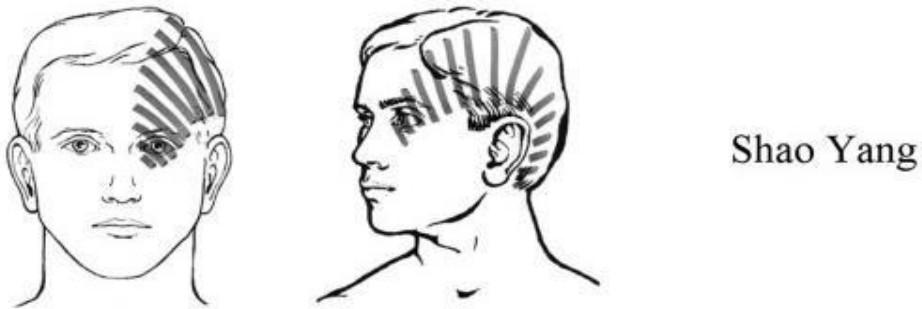


Fig 2-6. Headache of Shao-Yang type

Acupuncture for Headaches of Shao-Yang type

Local points: GB.4, GB.5, GB.6, GB.8, GB.9, GB.14 and GB.20, according to the location of the headache, in addition to Du20, Ex-HN-1 (Sishencong)

Distal points: GB.37, GB.41, SJ.3, SJ.5, LI.4, St.44, Liv.3, HT8

- **Yang-Ming type headaches:** Pain in the area of the forehead / temple, is related to Stomach channel, with most pain in the region of St.8. (Fig 2-7)

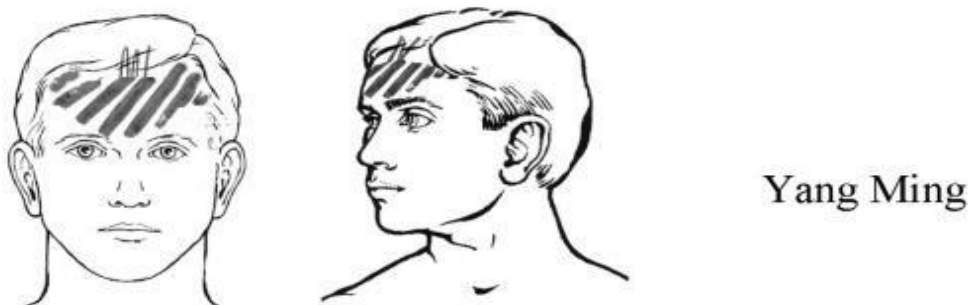


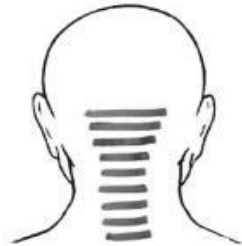
Fig 2-7. Headache of Yang-Ming type

Acupuncture for Headaches of Yang-Ming type

Local points: Du.20, GB.4, St.7, St.8

Distal points: LI.4, LI.11, St.36, St.44, PC8

- **Tai-Yang type headaches:** When the pain presents at the back of the head and the neck (along the urinary bladder channel), with the most pain in the area of UB.2 or UB.10. (Fig 2-8)



Tai Yang

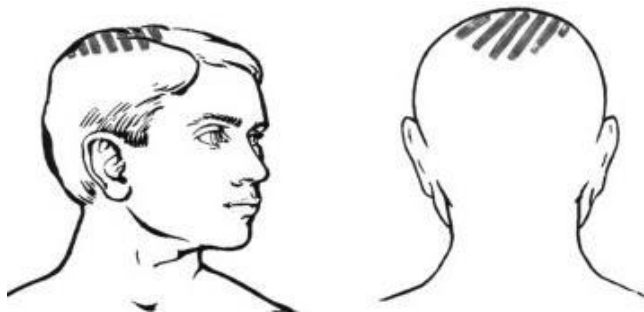
Fig 2-8. Headache of Tai-Yang type

Acupuncture for Headaches of Tai-Yang type

Local points: Du.20, UB.2, UB.10

Distal points: UB.60, UB.67, SI.3, LI.4, LU10

- **Jue-Ying type headaches:** Pain in the area of vertex (Du20) is related to the disturbance of liver channel (Fig 2-9). According to traditional ideas, an internal connection passes from the liver channel to the point Du20 at the vertex.



Jue Ying

Fig 2-9. Headache of Jue-Ying type

Acupuncture for Headaches of Jue-Ying type

Local points: Du20, Ex-HN-1 (Sishencong)

Distal points: LI.4, SJ.6, Liv.2, Liv.3, Liv.14, GB.34

Prescription for the treatment of Tension Headache and Migraine

1. Tension Headache

Local Points: GB8, GB14, GB20, GB21, UB10, ST8, Yintang, Taiyang, neck trigger points

Distal Points: GB34, UB12, UB15, LI4, LIV3, PC6, PC7, SP6

2. Migraine

Local Points: GB2, GB3, GB8, GB12, GB14, GB20, GB21, UB2, UB10, DU15, DU20, ST8, Taiyang, Yuyao, Anmian, trigger points

Distal Points: GB40, GB41, GB42, UB60, ST44, LIV3, LI4, SP6, ST36, TB5, REN12, REN13, REN20, DU11, PC6, SI3, SI5

Benefits of Important Acupuncture Single Points⁹ for relieving Headaches

The points illustrated in this part have multi functions. Acupuncture on these points is both helpful to treat headaches and to improve several physical, mental, psychological, sensory, neurological and digestive conditions in addition to insomnia and various types of pains and disorders. Based on the type and the location of the headache, a couple of acupuncture points on the following meridians may be used for headache and neck pain:

- **LUNG:** LU-7, LU-10
- **LARGE INTESTINE:** LI4, LI.5, LI.6, LI.11, LI.20
- **STOMACH:** ST.2, ST.7, ST.8, ST.9, ST.36, ST.40, ST.41, ST-44
- **SPLEEN:** SP.3, Sp6, SP9, Sp10
- **HEART:** HE.5, HE.8
- **SMALL INTESTINE:** SI.1, SI.3, SI.4, SI.7, SI9, SI10, SI11, SI12, SI13, SI14, SI15, SI.16
- **URINARY BLADDER:** UB.1, UB.2, UB.3, UB.4, UB.5, UB.6, UB.7, UB.9, UB.10, UB.11, UB.12, UB.13, UB.15, UB.18, UB.22, UB.56, UB. 58, UB.60, UB.62, UB.63, UB.64, UB.65, UB.66, UB. 67
- **KIDNEY:** Kid.1, Kid.3, Kid.4
- **PERICARDIUM:** Pe.6, Pe.7, Pe.8, Pe.9
- **SANJIAO:** SJ.1, SJ.3, SJ.4, SJ.5, SJ.6, SJ.8, SJ.15, SJ.16, SJ.23
- **GALLBLADDER MERIDIAN:** GB.1, GB.2, GB.3, GB-4, GB.5, GB.6, GB.7, GB.8, GB.9, GB.10, GB.11, GB.12, GB.13, GB.14, GB.15, GB.16, GB.17, GB.18, GB.19, GB.20, GB.21, GB.34, GB.36, GB.37, GB.38, GB.39, GB-40, GB-41, GB.42, GB.43, GB.44
- **LIVER:** LIV.2, LIV.3, LIV.8, LIV.14
- **CONCEPTION VESSEL:** REN.4, REN.6, REN.12, REN.13, REN.20
- **GOVERNING VESSEL:** DU.4, DU11, DU.12, DU.14, DU.15, DU.16, DU.17, DU.18, DU.19, DU.20, DU.21, DU.22, DU.23, DU.24, DU.26

⁹. The locations of the acupuncture points related to Headaches have been generally illustrated in diagrams. To find the more exact location of the points by standard scales you can refer to a standard atlas of acupuncture that you will find in the references of this article. The following website will be also helpful.

Extra Points for Headache

Ex-HN-1 (Sishencong), Ex-HN-5 (TAIYANG), Ex-HN-3 (Yintang), Ex-HN-4 (Yuyao), Ex-HN-6 (Erjian), Ex-HN (Anmian) and Ex-HN 14 (Yiming) are the most important extra points for headache and neck pain.

Headache Points on Extra Ordinary Meridians

As described previously, the eight extraordinary meridians (Vessels) run behind the 12 main meridians but interconnect with them and correspondingly allow for broad and deep effects within the body. They have a master and a coupled point on a pair of the main meridians that should be needed in order that the expected effects be attained. First, needle the master point of the main meridian you are treating (due to symptomology); then needle its coupled point.

Acupuncture for Du Mai and Yang Qiao Mai of the 8 Extraordinary Meridians, is effective for treating Headaches and issues of face and neck.

1. Du Mai / Governing Vessel – (Paired Meridian: Yang Qiao Mai) / (**Master Point: Si-3, Coupled Point: Ub-62**)
2. Yang Qiao Mai - (Paired Meridian: Du Mai) / (**Master Point: Ub-62, Coupled Point: Si-3**)

Specific Acupuncture Local Techniques for Headaches

Besides the above mentioned techniques, there are also *Specific Acupuncture Local Techniques* for Headaches so that the acupuncturist inserts the needles into the special acupuncture points on the head and direct them alongside the scalp towards the other points.

For example, in **Tongtianzhen Duifengci Needling Technique**, two needles are inserted against each other towards Baihui (DU20). The first from Shangxing (DU23) towards Baihui, the second from Qiangjian (DU18) towards Baihui (Fig 2-10). This technique is applied to treat the obstinate headaches.

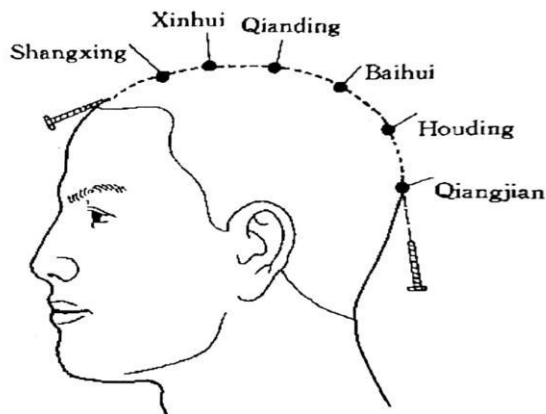


Fig 2-10. Tongtianzhen Duifengci Needling

In this section, we learned briefly the etiology, physiology, diagnosis and treatment strategies for various types of headaches in TCM Prospect. We also learnt the effects of single points, local and distal points, the principles of point selection and the combination of the points as well as the prescriptions utilizing the single or multiple points on standard, extra and extraordinary meridians in addition to Specific Acupuncture Local Techniques for treating Headaches. In the next sections, we will go through the methods beyond the meridians and acupuncture points, namely the microsystem acupuncture.

SCALP ACUPUNCTURE

In this section, we study the basics of scalp acupuncture and the methods of this approach to relieve headaches. As the scalp is an important microsystem, first we need to know what the microsystem acupuncture is and how it works.

MICROSYSTEM ACUPUNCTURE

The micro-acupuncture system originated from different times, countries, and areas. Although there are differences in origin, the common characteristic is groups of points located on specific parts of the body. Microsystems are considered holographic images of the entire individual projected onto a particular part of the body. The ear, eye, hand, scalp, foot, abdomen, face, tongue, and the iris are some of the commonly recognized acupuncture microsystems. Up till recent time there are about eighteen acupuncture microsystems have been discovered in the world.

Acupuncture Microsystems are regions of the body that contain maps of the entire organism with specific points or areas that correspond to each part. Stimulating these points and areas has a rapid and powerful regulatory effect on energy and blood, causing improvement in the function of the corresponding part of the body and relief in any acute pain. *Microsystems Acupuncture* is based on the belief that small well-defined areas of the body such as the hand, foot, face, scalp, eye and ear, correspond to all organs and parts of the body. Evidence shows that stimulating these areas, usually with needles, can be useful in the treatment of many disorders based on the region that is stimulated. The treatment generally involves the stimulation of defined points on a distinct area of the body, using a variety of techniques such as acupuncture, electrical stimulation or pellets.

Micro-acupuncture is easy to use, economical, safe, and practical. It has a broad spectrum of uses with an overall positive effect; it is used widely in diagnostics, therapeutics, anesthesia, and preventive medicine. Micro-acupuncture theory is based on Chinese medicine, Western medicine, and clinical experience; over time it has developed into its own complete system.

What is Scalp Acupuncture?

Scalp acupuncture therapy treats and prevents disease by needling specific stimulation areas on the scalp. It is a new therapy based on the theory of traditional Chinese medicine, acupuncture techniques, clinical experience, holographic theory, and a modern knowledge of the representative areas of the cerebral cortex. This therapy is often used clinically to treat central nervous system disorders, such as sequelae of cerebral disease, mal-development of the nervous system, and sequelae of brain damage, especially for paralysis due to stroke, as well as internal medicine, gynecology, and pediatrics. Scalp acupuncture is able to treat more than 100 different diseases. The scalp is the area where the Zang Fu, meridians, Qi, and blood connect; thus it has a close relationship with the human body's physiologic functions and pathologic changes. As a result, stimulating the scalp in specific areas will not only open the meridians, it will also harmonize Yin and Yang and regulate the functions of the Zang Fu organs to treat disease. Clinical research shows that scalp acupuncture stimulation is able to adjust cerebral functions and increase blood flow to the brain. Scalp acupuncture functions to help dilation and constriction of blood vessels, improve blood vessel elasticity, increase heart muscle contractility and decrease blood viscosity, and improve motor and sensory functions of the four extremities.

Indications of Scalp Acupuncture

Scalp acupuncture is widely used clinically for dysfunctions of the respiratory, vascular, digestive, reproductive, endocrine, immune, and neurological systems in the treatment of over 100 different diseases. It has been proven to be especially useful in the treatment of central nervous system (CNS) disorders, pain control, and acute conditions.

Cautions and Contraindications of Scalp Acupuncture

The following is a list of situations in which scalp acupuncture is strongly advised against or used only with extreme caution.

1. Infants less than 1-year-old or children with fontanelles not fully closed
2. Patients with open head wounds
3. Patients who display anxiety or nervousness, who are hungry and have not eaten, or who are overworked and fatigued are recommended for scalp acupuncture only with caution.
4. Patients with intracerebral hemorrhage
5. Pregnant women
6. Patients with high fever, acute inflammation, or heart failure
7. Correct diagnosis, accurate point selection, and accurate location are crucial for maximum benefits of this therapy.
8. If the patient experiences symptoms of headache, dizziness, nausea, vomiting, or cold hands with profuse sweating, remove the needles and have the patient rest and drink warm water.

Scalp Acupuncture Systems

Ten different scalp acupuncture systems exist:

1. International Standard of Nomenclature for Scalp Acupuncture (ISNSA)
2. Stimulation areas of the cerebral cortex (Jiao)
3. Head imaging scalp acupuncture (Fang)
4. Therapeutic zone scalp acupuncture (Zhu)
5. Yin-Yang scalp acupuncture (Tang)
6. New stimulation area for cerebral cortex functions (Lin)
7. Experimental scalp acupuncture
8. Ba Gua scalp acupuncture (Liu)
9. Japanese scalp acupuncture (Yamamoto)
10. Head meridians and points

Among the above-mentioned scalp acupuncture systems, we deal with the International Standard of Nomenclature for Scalp Acupuncture (ISNSA), Stimulation areas of the cerebral cortex (Jiao), Ba Gua scalp acupuncture (Liu), and Head meridians and points¹⁰.

International Standard of Nomenclature for Scalp Acupuncture (ISNSA)

The International Standard of Nomenclature for Scalp Acupuncture (ISNSA) was adopted in 1984 and reconfirmed in 1989 by the World Health Organization for the purpose of international academic exchange along with growth, improvement, and development of acupuncture.

STANDARD LINES IN ISNSA:

Frontal region

Line MS3: Line 2 Lateral to Forehead

Line MS1: Middle line of forehead

Line MS4: Line 3 Lateral to Forehead

Line MS2: Line 1 Lateral to Forehead

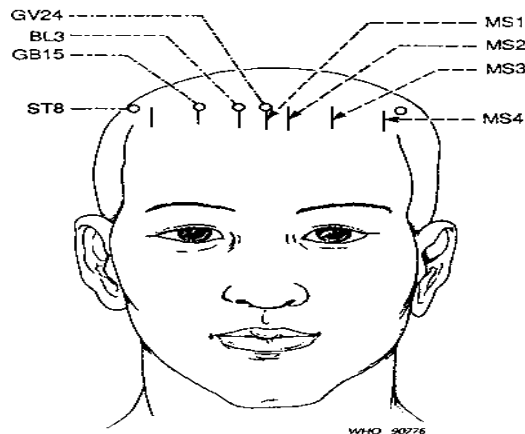


Fig 2-11. Frontal Region

Notice: All the four lines in the frontal region are applied for headaches

Vertex region

Line MS7: Posterior Oblique Line of Vertex-Temporal

Line MS5: Middle Line of Vertex

Line MS8: Line 1 Lateral to Vertex

Line MS6: Anterior Oblique Line of Vertex-Temporal

Line MS9: Line 2 Lateral to Vertex

¹⁰ - You can find the exact location of the lines and areas of scalp acupuncture in reliable sources



Fig 2-12. Temporal and Vertex Region

Notice: All the five lines in the vertex region are applied for headaches

Temporal region

Line MS11: Posterior Temporal Line

Line MS10: Anterior Temporal Line

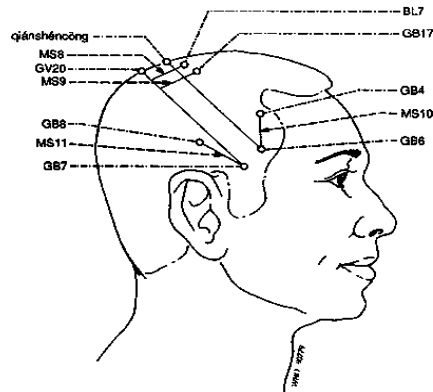


Fig 2-13. Temporal Region

Notice: Both MS10 and MS11 in the temporal region are applied for migraine headaches

Occipital region

Line MS14: Lower-Lateral Line of Occiput

Line MS12: Upper-Middle Line of Occiput

Line MS13: Upper-Lateral Line of Occiput

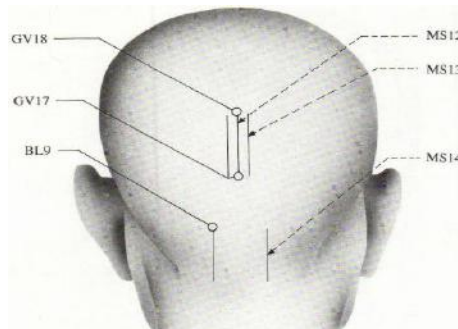


Fig 2-14. Occipital Region

Notice: Lines in the occipital region are applied for posterior headaches and neck pain

JIAO SCALP ACUPUNCTURE

(Stimulation Areas of the Cerebral Cortex)

This method is a combination of traditional Chinese medicine with modern medical knowledge of cerebral cortex function. The Jiao acupuncture techniques focus on inserting the needle quickly, fast rotation manipulation, and quickly withdrawing the needle. In the Jiao Scalp Acupuncture system, the side of the head can be viewed as being in the shape of a human body with the head downward and the feet upward. Therefore the foot area of the body is located close to the vertex, and the face area of the body is located around the lower temple area of the head.

There are a total of 16 scalp stimulation areas in this system. They are Motor area, Sensory area, Chorea and tremor control area, Blood vessel dilation and constriction area, Vertigo and hearing area, Speech 2, Speech 3, Usage area, Foot motor and sensory area, Vision area, Balance area, Stomach area, Thoracic cavity, Reproduction area, Liver and gallbladder area and Intestine area.

Figure 2-15 & 2-16 shows the lateral stimulation areas, vertex stimulation area, posterior stimulation areas, and anterior stimulation areas of the Jiao Scalp Acupuncture system.

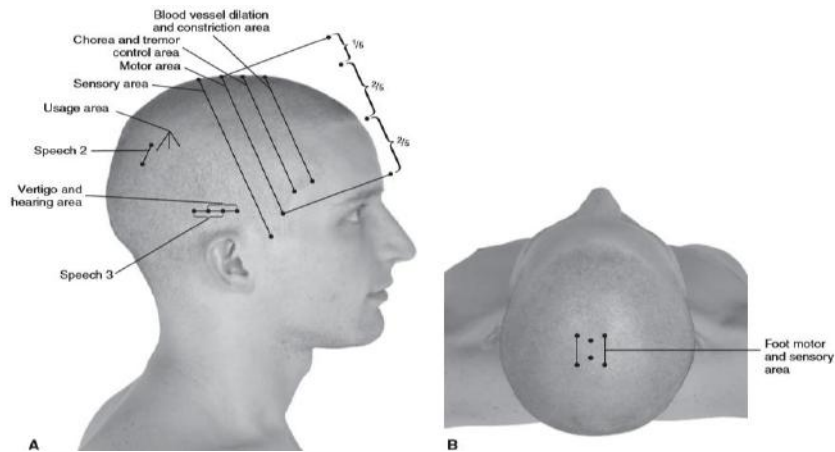


FIGURE 2-15: A. Lateral stimulation areas of Jiao scalp acupuncture. B. Foot motor and sensory area of Jiao scalp acupuncture.

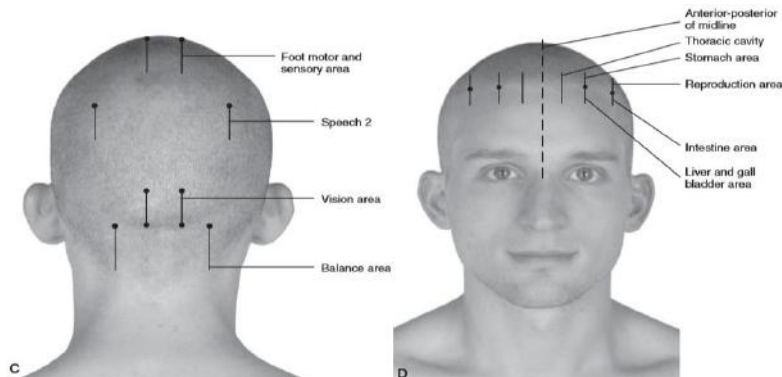


FIGURE 2-16: C. Posterior stimulation areas of Jiao scalp acupuncture. D. Anterior stimulation areas of Jiao scalp acupuncture.

Jiao Scalp Acupuncture is indicated for various conditions. Among different areas in this system, the Sensory Area, Vision Area and Balance Area offer recognized indications for occipital headache, neck pain, migraine, eye pain, trigeminal neuralgia and toothache.

Ba Gua Scalp Acupuncture (LIU SCALP ACUPUNCTURE)

Ba Gua scalp acupuncture system is based on the theory of head meridians and points, combined with traditional acupuncture theory, and theories of modern anatomy and physiology. This kind of scalp acupuncture mainly treats conditions of paralysis, stroke, Parkinson's disease, and brain and head disorders. There are 11 methods of Ba Gua Scalp Acupuncture, nearly all of which can be applied for Headaches, Migraine and Neck Pain based on the region and type of the pain.

1. Ba Gua 1–Du 20 (Bai Hui) of Small Ba Gua
2. Ba Gua 2–Du 20 (Bai Hui) of Medium Ba Gua
3. Ba Gua 3–Du-20 of Large Ba Gua
4. Ba Gua 4–Du 20 (Bai Hui) of Anterior Ba Gua
5. Ba Gua 5–Du 20 (Bai Hui) of Posterior Ba Gua
6. Ba Gua 6–External Occipital Protuberance Ba Gua
7. Ba Gua 7–SJ-20 (Jiao Sun) of Upper Ba Gua
8. Ba Gua 8–SJ 20 (Jiao Sun) of Superior-Posterior Ba Gua
9. Ba Gua 9–St-8 to GB-7 Ba Gua
10. Ba Gua 10–Du-24 Ba Gua
11. Ba Gua 11–St-8 Ba Gua

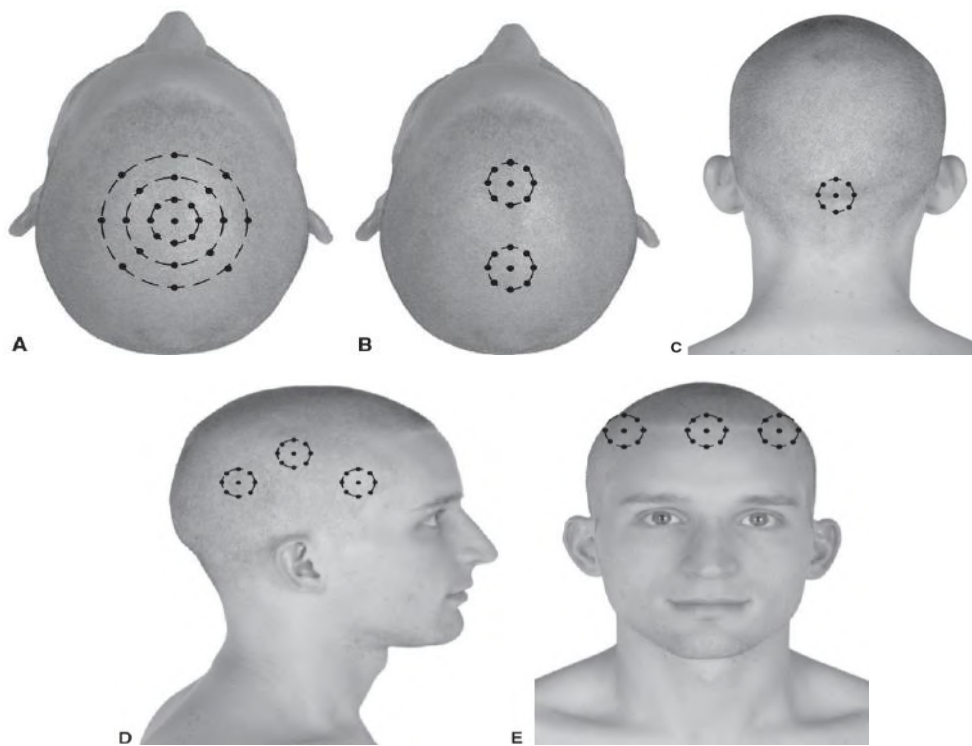


FIGURE 2-17: A. The small, medium, and large Ba Gua of Du-20. B. Anterior Ba Gua and posterior Ba Gua in the superior view of the scalp. C. External occipital protuberance Ba Gua in the occipital view of the scalp. D. SJ-20 of superior-posterior Ba Gua, SJ-20 of upper Ba Gua, St-8 to GB-7 Ba Gua. E. Du-24 Ba Gua in the middle of the forehead and St-8 Ba Gua bilaterally on the lateral corners of the forehead.

Head Meridian and Points

The head is the intersection area of many meridians. The six Yang meridians of the hands and feet all travel up to the head. The six Yin meridians connect with the head directly or indirectly. Many meridians and points are distributed on the head, along with being the collection areas for the Zang Fu, Qi, and blood. Therefore, stimulation of points on the head not only treats diseases of the head but also treats whole-body disease associated with the function and meridian connection.

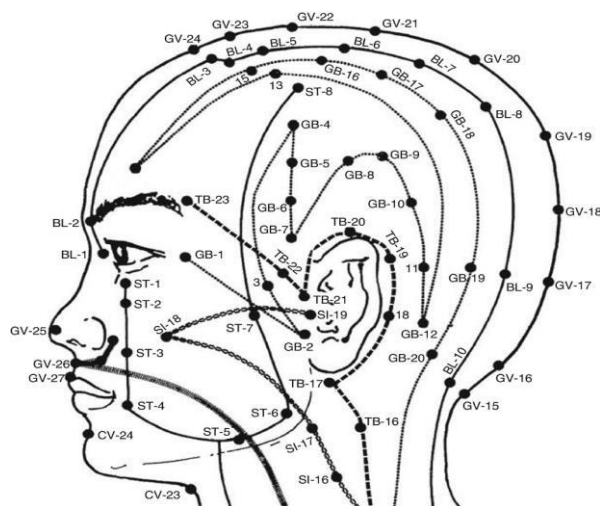


Fig 2-18. Meridians and Acupuncture Points on Head and Face

As described in this chapter, Scalp Acupuncture is a new therapy based on the theory of traditional Chinese medicine, acupuncture techniques, clinical experience, holographic theory, and a modern knowledge of the representative areas of the cerebral cortex. Ten different scalp acupuncture systems exist that the International Standard of Nomenclature for Scalp Acupuncture (ISNSA), JIAO SCALP ACUPUNCTURE and Ba Gua Scalp Acupuncture were presented and explained as the most important methods.

AURICULOTHERAPY (EAR ACUPUNCTURE)

Introduction

Auriculo-therapy (also auricular therapy, ear acupuncture, and auricular acupuncture) is a form of alternative medicine based on the idea that the ear is a microsystem, which reflects the entire body, represented on the auricle, the outer portion of the ear. Auriculotherapy gets its name from the “Auricle” which is the anatomic name for the external ear. Auriculotherapy is a healthcare modality whereby the external surface of the ear, or auricle, is stimulated to alleviate pathological conditions in other parts of the body. The discovery of this therapy is partially based on the ancient Chinese practice of body acupuncture, yet it is also derived from the discoveries by a French physician in the 1950s. Dr. Paul Nogier and colleagues demonstrated that specific areas of the external ear were associated with pathology in specific parts of the body.

Ancient health practitioners believed that the ear is not only the organ of hearing but that it also has a close relationship with Zang Fu and meridian pathology. The surface of the ear is the connecting point of many meridians and nerves. Disease happens on the inside of the body but shows on the outside. Internal organ disorders will reflect on the external ear through the meridians. Acupuncture on these points is able to treat Zang Fu disease. Auriculotherapy techniques use special locations, or points, on the skin of the ear to diagnose and treat pain and medical conditions of the body. Whether used in conjunction with another treatment or by itself, auriculotherapy is often effective when other treatments have failed, or in conjunction with other treatment types. Best of all, auriculotherapy is safe, non-invasive and has no side effects. Auriculotherapy tends to not only eliminate pain, but also stimulate healing of the affected body part.

Auriculotherapy is a natural complement to many types of healthcare, including acupuncture, chiropractic, western medicine, naturopathy, physical therapy¹¹ and even psychotherapy. Auriculotherapy is often helpful for many health conditions, both physical and mental and nearly all conditions can be treated from the ear. Conditions affecting the physical, mental or emotional health of the patient are assumed to be treatable by stimulation of the surface of the ear exclusively. The WHO General Working Group meeting recognized that auricular acupuncture is well developed and the best scientifically documented of all the micro-systems of acupuncture. It is also the most practical and widely used.

¹¹ - Physiotherapists are among the practitioners using auriculotherapy. Auriculotherapy is a powerful adjunct to transcutaneous electrical nerve stimulation (TENS), traction, ultrasound, and therapeutic exercises for the treatment of acute whiplash injuries, severe muscle spasms, cervical and lumbar chronic pain.

INDICATIONS

Ear acupuncture is used to improve the body's flow of vital energy (also known as chi or qi) and to restore a balance between yin and yang (two opposing but complementary energies) within the internal organs. Auricular acupuncture can be used for a wide range of indications, and it is especially useful to relieve pain. Some of the most successful uses of Auriculotherapy include:

- Headaches / Neck Pain
- Migraines
- Insomnia
- Endocrine system disorders
- Irritable bowel syndrome
- musculoskeletal injuries
- Low back pain
- Infectious diseases
- Obesity
- Skin Disease
- Allergies
- Anxiety
- Arthritis
- Internal disorders
- Constipation
- Mental disorders
- Depression
- Addiction treatment / smoking cessation
- Chronic Pain
- Fibromyalgia

As listed in the indications of Ear Acupuncture, Auricular therapy has a strong function to stop pain; often the pain will be relieved once the needle is inserted. It can be used to pain management and treat pain such as the following:

- Pain from trauma:*** Sprained tendons, broken bones, cuts, burns, and dislocations.
- Pain from infections:*** Tonsillitis, appendicitis, and mastitis.
- Pain from nerve disorders:*** Trigeminal neuralgia, migraine, sciatic nerve pain, and herpes zoster.
- Pain after surgery:*** Including pain from incisions and scar tissue.
- Pain from tumors:*** Headache and abdominal pain due to tumor pressure.

Above mentioned conditions are just among the most important disorders treated by ear acupuncture since it has been successfully applied to nearly any problem imaginable.

What cannot be treated with ear acupuncture?

- Congenital faults
- Major mechanical defects
- Cancer
- Degenerative diseases
- Diabetes

PRECAUTIONS

- The most common adverse side effect from auriculotherapy is that the ear may become red and tender to touch after the treatment.
- Although it is very uncommon for patients to report adverse reactions to the auriculotherapy treatment, this is a possibility.
- Any bleeding after the insertion of an acupuncture needle into the ear is usually very brief and rarely leads to an infection.
- Some patients may become sleepy or dizzy after a treatment and they may need to lie down for a while.
- Allow nervous, anxious, weak, or hypertensive patients some time for a rest after the treatment.
- Avoid treating patients when they are excessively weak, anemic, tired, fasting, hypoglycemic, or have just eaten a heavy meal.
- Be cautious when treating pregnant women.
- Do not use electrical stimulation on patients with a cardiac pacemaker.
- Do not use aggressive stimulation with children or elderly patients.
- Inform the patient to not use alcohol or recreational drugs before the auriculotherapy treatment.

Human Fetus Holography on Auricle

The ear is a complete bio-holographic unit. In fact, it is the most detailed bio-holographic image. The ear is analogous to a *fetus upside down* in the mother's uterus. All the Zang Fu and four extremities of the human body have regional imaging on the ear. Images of the somatotopic pattern on the external ear were developed by Dr. Terry Oleson, showing an inverted fetus perspective (A) and an actual orientation of the somatotopic body (B). (Fig 2-19)

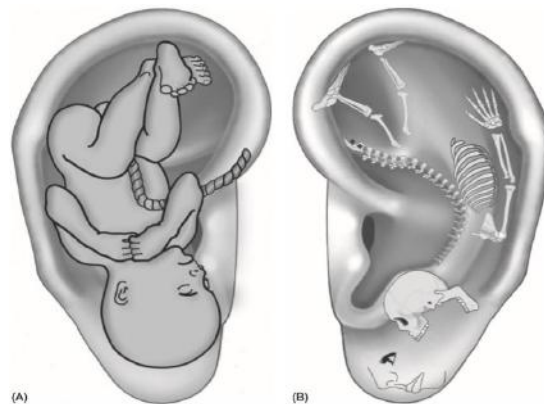


Fig 2-19. Inverted fetus perspective (A) Actual orientation of the somatotopic body (B).

The results of a study on auricular diagnosis published in 1980, illustrated the somatotopic regions of the external ear that shows the musculoskeletal ear reflex points. (Fig 2-20)

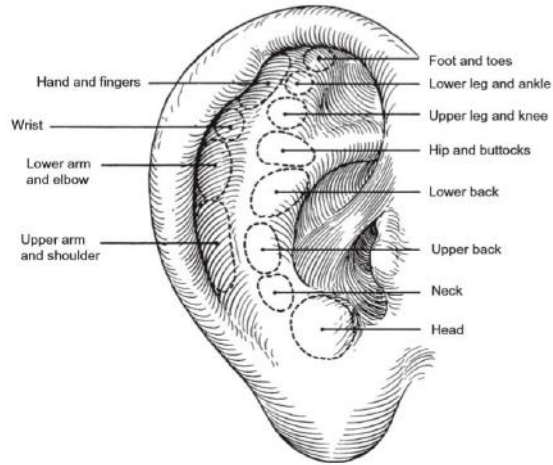


Fig 2-20. Musculoskeletal ear reflex points.

Anatomical Regions of Auricular Surface

Ear Canal, Helix, Helix Root, Helix Arch, Helix Tail, Antihelix, Antihelix Tail, Antihelix Body, Superior Crus of the Antihelix, Inferior Crus of the Antihelix, Tragus, Antitragus, Inter-tragic Notch, Lobe, Scaphoid Fossa, Triangular Fossa, Concha, Superior Concha or Cymba, Inferior Concha or Cavum, Concha Ridge, Concha Wall, Sub-tragus and Internal Helix are the anatomical regions of auricular surface. (Fig 2-21. A)

Anatomy of Posterior Ear

Posterior Lobe, Posterior Groove, Posterior Triangle, Posterior Concha and Posterior Periphery are the anatomical regions of posterior ear. (Fig 2-21. B)

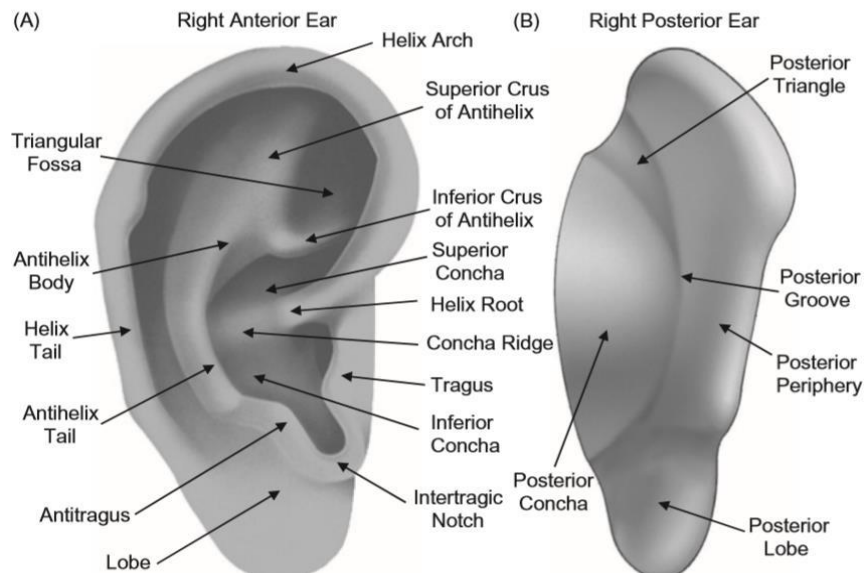


Fig 2-21. Anatomical Regions of Auricular Surface. (A) Anterior surface (B) Posterior surface

Somatotopic Correspondences to Specific Auricular Regions

In auriculotherapy, an active reflex point is only detected when there is some pathology, pain, or dysfunction in the corresponding part of the body. If there is no bodily problem, there is no ear reflex point. An active reflex point is identified as an area of the ear that exhibits increased sensitivity to applied pressure and increased electrodermal skin conductivity. The health disorders that are commonly associated with each part of the auricle when there is pathology in a particular anatomical organ are presented as follow.

Helix: Anti-inflammatory points and treatment of allergies and neuralgias.

Helix Root: Dysfunctions of one's external genitals, sexual disorders, urinary dysfunctions, and diaphragmatic problems such as hiccups.

Helix Arch: Allergies, arthritis, tonsillitis, and anti-inflammatory processes.

Helix Tail: Representing the dorsal horn, sensory neurons of the spinal cord, and the preganglionic sympathetic nervous system, this region is used for the treatment of peripheral neuropathies and neuralgias.

Antihelix: Treatment of problems related to the main torso of the body that are related to pain and tension associated with the musculoskeletal system.

Superior Crus: Disorders of the lower extremities of the leg and foot.

Inferior Crus: Low back pain, lumbosacral disorders, buttocks spasms, and sciatica.

Antihelix Body: Thoracic spine back problems, chest pain, shingles, and problems with the abdominal muscles.

Antihelix Tail: Neck pain, disorders of the cervical spine, and throat problems.

Lobe: Dysfunctions related to the cerebral cortex of the brain, uncomfortable facial sensation, eye disorders, jaw pain, and dental analgesia.

Tragus: Problems with the corpus callosum, appetite control, and adrenal glands.

Antitragus: Frontal, temporal, and occipital headaches.

Inter-tragic Notch: Hormonal disorders of the pituitary gland control of other glands.

Scaphoid Fossa: Problems in the upper extremities, such as frozen shoulder, stiff arm, tennis elbow, sprained wrist, hand tremors, and aching fingers.

Triangular Fossa: Problems in the lower extremities, such as hip pain, knee injuries, sprained ankle, foot pain, cold feet, uterus dysfunctions, and pelvic organ problems.

Concha: Visceral organ disorders.

Superior Concha: Disorders related to abdominal organs, such as the dysfunctions of the pancreas, gall bladder, kidney, and urinary bladder.

Inferior Concha: Disorders related to thoracic organs, such as heart problems and lung disease. It is also used for the treatment of substance abuse.

Concha Ridge: Disorders related to the stomach and liver.

Concha Wall: Dysfunctions associated with the thalamus of the brain, including general pain, sympathetic nerve problems, and vascular circulation disorders.

Sub-tragus: Laterality problems, auditory nerve deafness, and internal nose and throat disorders.

Internal Helix: Dysfunctions related to the internal genital organs, kidney disorders, and allergies.

Posterior Ear: Disorders related to motor activity and problems with the musculoskeletal body, such as muscle spasms and motor paralysis.

Posterior Lobe: Dysfunctions of the pyramidal motor cortex, the extrapyramidal striatal system, cerebellar tremors, and eye twitches.

Posterior Groove: Pain and muscle spasms of paravertebral muscles.

Posterior Triangle: Problems with motor control of leg movement, leg muscle spasms, and leg motor weakness.

Posterior Concha: Problems with motor control of internal organs.

Posterior Periphery: Problems with motor neurons of spinal cord, including tremors in arm and hand movements.

Based on this correspondence system, the acupuncturist treats different diseases by needling the reflex points related to the pathology of the disease on the correspondent region.

As Auricular Acupuncture is one of the two main approaches that will be discussed in this essay, the main theories of auriculotherapy, Projection Zones for Ear Acupuncture, The Topography and Indications of Auricular Acupuncture Points and the Treatment of Headaches and Migraines by Auricular Acupuncture will be described in the later sections.

EYE ACUPUNCTURE

(OCULAR ACUPUNCTURE)

Eye acupuncture was invented by Dr. Jing-Shan Peng in China in the 1970s. He introduced it to the world in 1986. With eye acupuncture, the eyes are used for both the diagnosis and the treatment of disease. This therapy is easy to use, provides rapid and excellent results, and is safe and painless. Eye acupuncture is different from other acupuncture micro-systems in that the changes in the vessels of the bulbar conjunctiva¹² are observed for diagnosis. Point selection and treatment principles are based on these findings.

Eye Acupuncture is based on the relationship between the Ba Gua¹³, five elements, and Zang Fu¹⁴. To make it more convenient, Dr. Peng used the numeric system: 1, 2, 3, 4, 5, 6, 7, and 8 to represent the Ba Gua as Qian, Kan, Gen, Zhen, Xun, Li, Kun, and Dui on the eye¹⁵.



Fig 2-23. Ba Gua 8 Symbols Chart

The eyes connect the energy of the Zang Fu organs externally and the 12 meridians connect directly or indirectly with the eyes. Stimulation of the eye around the orbital margin can open the meridians, invigorate blood, stop pain, calm the Shen, and regulate the Zang Fu function.

Eye Acupuncture

Locations and Indications

Eye acupuncture locations consist of a total of four regions, eight areas, and thirteen points.

¹² - Bulbar Conjunctiva is the clear membrane that covers the whites of the eyes.

¹³ - Chinese Eight-Symbol System

¹⁴ - The relationship between the Ba Gua, five elements, and Zang Fu are: Qian (metal): lung and large intestine - Kan (water): kidney and bladder - Zhen (wood): liver and gallbladder - Li (fire): heart and small intestine - Kun (earth): spleen and stomach - Gen (mountain): upper Jiao - Xun (wind): middle Jiao - Dui (rain) lower Jiao

¹⁵ - The Ba-Gua of Qian, Kan, Gen, Zhen, Xun, Li, Kun, and Dui represent the eight natural phenomena, which are the sky, rain, fire, thunder, wind, water, mountain, and earth.

Four Regions and Eight Areas

With your eye looking straight ahead, draw a horizontal line connecting the inner canthus with the outer canthus. Draw a vertical line from the infraorbital region and the superior orbital region, dividing the eye into four regions. Each of the four regions is then further divided into two separate areas, making a total of four regions and eight areas. (Figure 2-24)

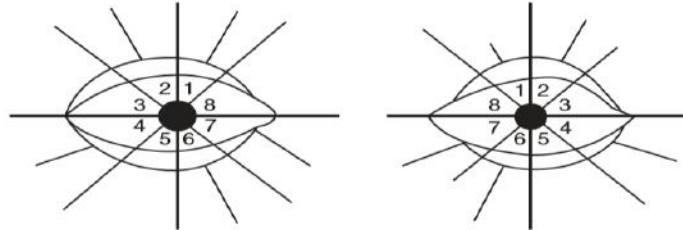


Figure 2-24. The four regions and eight areas of the eyes.

Zang Fu of Each Area

The left and right eye each have the same representative Zang Fu areas. (Fig 2-25)

- The first area is the lung and large intestine (LU / LI).
- The second area is the kidney and urinary bladder (Kid / UB).
- The third area is the upper Jiao (U.SJ).
- The fourth area is the liver and gallbladder (Liv / GB).
- The fifth area is the middle Jiao (M.SJ).
- The sixth area is the heart and small intestine (HT / SI).
- The seventh area is the spleen and stomach (SP / ST).
- The eighth area is the lower Jiao (L.SJ).

There is about 45° between each area.

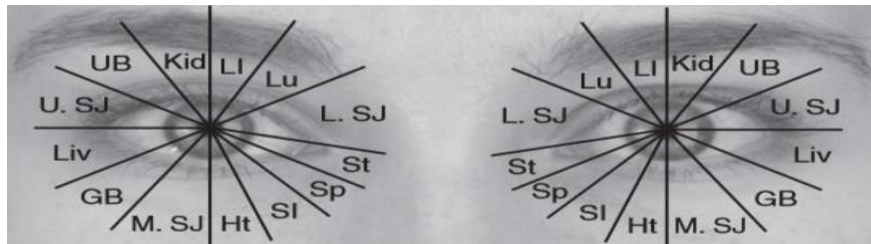


Fig 2-25. The eight areas of the eyes with the thirteen Zang-Fu points

Thirteen Points

The 13 points are distributed as follows: area one, area two, area four, area six, and area seven each have two points that indicate one Zang and one Fu organ¹⁶. Area three, area five, and area eight each have only one point. The eye micro-system condenses the whole body's 361 points into 13 points, distributed around the orbital margin (about 1.0 cm from the edge of the orbit), each

¹⁶ - Lu – Lung, LI – Large intestine, Kid – Kidney, UB – Urinary bladder, Liv – Liver, GB – Gallbladder, HT – Heart, SI – Small intestine, SP – Spleen, ST – Stomach, L.SJ – Lower Jiao, M.SJ – Middle Jiao, U.SJ – Upper Jiao

with specific functions. The points are named according to the Zang Fu they represent. Each point treats disease within the representative Zang Fu and Jing Luo¹⁷.

AREA 1- *Organs:* Lung and Large intestine.

AREA 2- *Organs:* Kidney and Urinary bladder.

AREA 3- *Organ:* Upper Jiao.

AREA 4- *Organs:* Liver and Gallbladder.

AREA 5- *Organ:* Middle Jiao.

AREA 6- *Organs:* Heart and Small intestine.

AREA 7- *Organs:* Spleen and Stomach.

AREA 8- *Organ:* Lower Jiao.

Diagnosis of Disease by Observation of the Eye

The treatment principle will depend on the traditional Chinese medicine diagnosis; however, with eye therapy the primary basis for diagnosis is visual observation of the eye, which can be confirmed by the patient's symptoms. Point selection will depend on the pathogenic changes of the eight areas and thirteen points of the eye, as well as clinical symptoms.

Indications of Eye Acupuncture

1. Eye acupuncture therapy is very effective when used for pain control.
2. Eye acupuncture is also effective in treating paralysis due to cerebral embolism, cerebral hemorrhage, and cerebral thrombosis.
3. Eye acupuncture can be used to treat other conditions such as itching skin and rashes, insomnia, Parkinson's disease, hypertension, or rheumatoid arthritis and myelitis causing paralysis in the lower limbs.



Fig 2-26. Illustrations of Eye Acupuncture

¹⁷ - Jing-luo (meridians): The channels that connect the *Zang-fu* organs and regulate the flow of vital energy throughout the body.

Treatment Protocols for different Conditions

Paralysis by stroke: Upper Jiao area and Lower Jiao area

High blood pressure¹⁸: Both sides of the Liver area

Irregular heartbeat: Both Heart areas

Chest pain: Both the Upper Jiao area and the Heart area

Stomach pain: Middle Jiao area, Stomach area

Facial paralysis: Upper Jiao area

Chronic bronchitis: Lung area

Low back pain: Lower Jiao area and Kidney area

Diarrhea: Large intestine area

Constipation: Large intestine area

Urinary incontinence: Lower Jiao area, Liver area, and Kidney area

Impotence: Lower Jiao area

Frozen shoulder: Upper Jiao area and Large intestine area

Painful menses: Both sides of the Lower Jiao area

Sinusitis: Upper Jiao area and Lung area

Cautions and Contraindications

1. Before needling, it is important to follow clean needle technique, being careful not to get alcohol in the eye.
2. After inserting the needles, use your hand to palpate the orbital margin.
3. If you needle the 7 area or 8 areas, be careful not to insert the needle deeply and cause damage to the inner canthus artery.
4. Some people have more veins on the surface of the eyelid. These patients are not good candidates for eye acupuncture.

¹⁸ - Eye acupuncture has a two-way adjusting function for arteries that is effective for patients' blood pressure. Eye acupuncture can either increase blood pressure for patients with low blood pressure or reduce blood pressure for patients with high blood pressure.

EYE ACUPUNCTURE IN THE TREATMENT OF HEADACHES

- ***General prescription for Headaches:*** Right eye upper Jiao area; Left eye liver area; Left eye gallbladder area.
- ***Neck pain or stiffness:*** Upper Jiao area and Bladder area
- ***Occipital headache:*** Upper Jiao area and Bladder area
- ***Migraine headache:*** Upper Jiao area and Gallbladder area
- ***Sinusitis:*** Upper Jiao area and Lung area
- ***Pain around the eye area:*** Upper Jiao area, Liver area, Spleen area, GB-1

FACE MICROSYSTEM ACUPUNCTURE

One of the features of traditional diagnosis is the identification of color changes on the skin with pathology in a particular Organ or Organ system. Although not always apparent, these color changes are most often reflected in the face. Observing the face for diagnosis is an important procedure for face acupuncture. The facial color and skin conditions can provide information regarding duration of the disease, seriousness of the disease, and whether it is an excess or a deficiency condition. Facial observation is also important for the treatment plan.

Face acupuncture theory is based on the traditional Chinese medical practice of Facial Diagnosis. Facial Diagnosis is an important aspect of diagnosis in traditional Chinese medicine. The Chinese physicians realized the close relationship between the external areas of the body, especially the face, eyes, tongue, and the internal organs.

Many of the meridians and divergent meridians of the body rise upward and connect with the face and head. Therefore, any pathology will be reflected in the facial area, and acupuncture stimulation of these points can treat internal disease. Stimulation of facial points will open the meridians, harmonize Qi and blood, and reestablish balance in the body. Face acupuncture has been proven to have a positive impact on the immune system, to reduce pathology, and to improve the physiologic foundation of the body.

Face Acupuncture System

Two different face acupuncture systems exist: 1. Face acupuncture 2. New face acupuncture

Face Acupuncture

POINT LOCATIONS: Facial acupuncture involves 5 areas with a total of 24 points. From the forehead to the upper lip are 7 single points, and on the side of the nose, eye, mouth, cheeks, and jaw are 17 paired points. The seven single midline and seventeen pair of bilateral face and nose acupuncture points are illustrated in Figure 2-27.

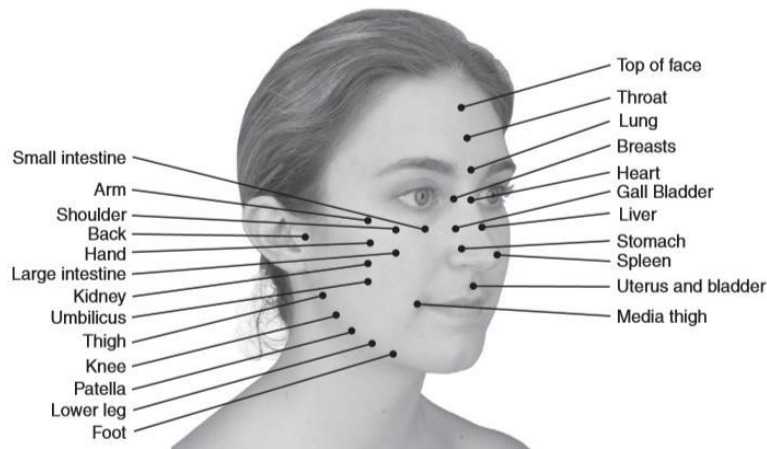


Figure 2-27. Side view of the five areas with twenty-four points used in facial acupuncture

In spite of clinical importance of Face Acupuncture, the New Face Acupuncture System was introduced later and has been effectively practiced in recent decades.

New Face Acupuncture

New face acupuncture therapy is a new micro-system developed within the last few years. Despite its recent development, it has proven to be an effective therapy through numerous clinical experiences. The advantages of new face acupuncture therapy are that it is easy to learn, simple, and convenient to use, as well as good at achieving results. The point distribution is different from face acupuncture and therefore is called new face acupuncture therapy.

The theory of new face acupuncture therapy is based on bio-holographic theory, which states that any part of the human body is a holographic unit, also called Embryo Containing the Information of the Whole Organism. In the human body, this unit is used throughout many parts of the body and contains similar biological information. Traditional Chinese medicine believes that each local area of the body has a close relationship with the whole body. The pathological changes at the local area contain the whole-body Zang Fu, Qi, blood, Yin, and Yang information.

The facial area is more than just individual structures of tissues; it has a close relationship with meridians and the Zang Fu. Based on holographic theory, the relationship between the face and the whole-body physiology and pathology is represented by a human body in prone position overlaid on the central part of the face. Through the stimulation of the related parts of the body with sensitive points on the face, this therapy is able to treat disease.

POINT LOCATIONS: The point distribution for new face acupuncture therapy is mostly named according to a specific part of the human body (Figure 2-28). Each point will treat the corresponding part of the body and Zang Fu. From clinical experience, the therapy has effective results for patients suffering from stroke, digestive system conditions, such as belching, gallbladder conditions, and pain.

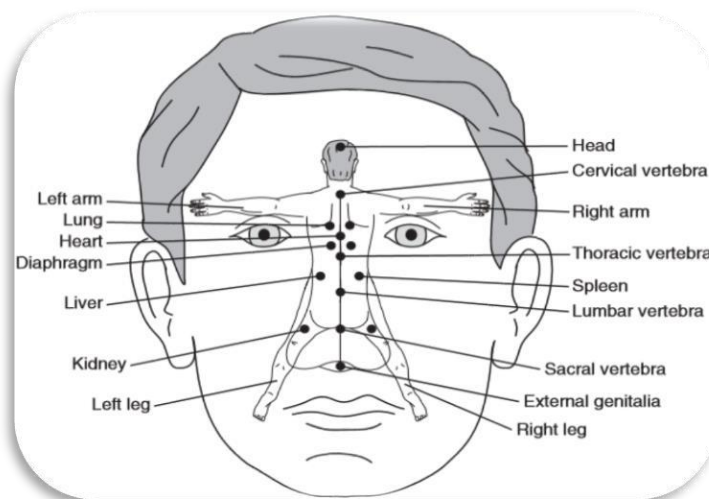


Fig 2-28. New face acupuncture therapy point distributions

Treatment Protocols in New Face Acupuncture

Sore throat: Use the Throat point.

Dysmenorrhea: Use the Uterus and Bladder points.

Abdominal pain: Use the Large Intestine, Small Intestine, and Umbilicus points.

Back and low back pain: Use the Back, Thigh, and Kidney points.

Shoulder pain: Use the Shoulder and Arm points.

Knee pain: Use the Knee and Patella points.

Swelling of the feet: Use the Foot point.

Insufficient lactation: Use the Breast point.

Cautions and Contraindications

1. Before acupuncture, follow the clean needle technique guidelines to prevent infection. Do not insert needles around scar tissue or pimples to prevent infection.
2. The face-and particularly the nose-is very sensitive to needle stimulation. Many sites are simply painful to needle. The physician can help somewhat by avoiding deep insertion on the nose, and minimizing the manipulation of the needle once in place.
3. Facial points contain many blood vessels; therefore, it is important to apply adequate pressure to the points on withdrawal of the needles to avoid bleeding and bruising of the face.
4. The face is a sensitive area of the body, so needling technique should focus on gentle and skilled insertion to prevent a hematoma.

FACE ACUPUNCTURE IN THE TREATMENT OF HEADACHES

Face Acupuncture is a safe, easy and effective way to relieve headaches. Stimulation of facial points will open the meridians, harmonize Qi and blood, and reestablish balance in the body. Face Acupuncture Points can be selected either for the anatomic area of the body by bio-holographic map on the face, or for areas of the body according to traditional Chinese medical theory, or according to the five-element cycle, or sometime for tenderness or sensitivity in areas of the face that reflect the patient's disease in specific areas of the body.

Treatment Protocols

- **(1) Face Acupuncture:** Arm Area and Forehead Area are the points for Headaches
- **(2) New Face Acupuncture System:**

Headaches: Use the Face, Liver, and Kidney points.

Stiff and Painful Neck: Use the Head, Cervical Vertebrae and Shoulder.

ABDOMINAL ACUPUNCTURE

Abdominal Acupuncture was developed by Professor Zhiyun Bo and it has been used in China since 1991. It is also known as Bo's Method of Abdominal Acupuncture. Abdominal Acupuncture (AA) is a micro-system of acupuncture and like other microforms, such as auricular acupuncture, all the organs and body parts are contained (reflected) within a small area.

Unlike other micro-systems AA is much more powerful as a result of its proximity with the Zang Fu organs and because it connects with all the meridians of the body. As a therapy it has become very popular in China because of its impressive results and its gentle nature (minimal needle sensation). The results are often achieved within moments of inserting the needle to the correct depth. It is very versatile and can treat all-over body pain in one treatment.

The abdomen is recognized as our second brain. It has the largest number of nerve cells next to the brain. As a result, it has immense control over our emotional wellbeing as well as our overall health. The abdomen produces about 80% of all serotonin a hormone responsible for mood, sleep, learning and blood pressure. Abdominal acupuncture therefore has far reaching effects and also helps to relieve depression and improve sleep.

In 2007 abdominal acupuncture was recognized as a professional subcommittee under the China Acupuncture and Moxibustion Association. Today abdominal acupuncture is recognized in the treatment of all kinds of muscular-skeletal pain, many cerebro-vascular and neurological conditions, respiratory and heart disease, gynecological and psychological disorders.

Special significance of Abdomen for Acupuncture

- The abdomen is recognized as our 'energy center'.
- The abdomen has access to all of the 12 regular channels and is also traversed by many of the extraordinary meridians.
- The navel (umbilicus) is the location for REN8. It is said to be entrance and exit point of the shen. The navel is where Fire and Water meet, where Yin and Yang reside. It is the sea of essence and energy, the door of life and death"
- The points below the umbilicus (including the points Ren 6 and Ren 4) is said to be the seat of the body's Yuan (source) Qi and Jing (Essence).
- The Vicinity of the Zang Fu Organs to the Abdomen: All the Zang Fu organs reside in this area and can be accessed either directly or through the AMS¹⁹ connection.
- Modern science is also recognizing the importance of the abdomen in many areas of health, including digestion, immune function, sleep, mood, depression, and even neurological diseases.
- The abdomen is often referred to as our second brain because it contains the greatest number of neurons outside of the brain and the spinal cord. It is responsible for the production of many neurotransmitters and hormones such as serotonin.

¹⁹ - Acupuncture Meridian System

The Areas and Levels of Abdominal Acupuncture

Abdominal acupuncture (AA) uses the area between Ren-12 and Ren-4 on the vertical line and Sp-15 as the outer most points on the horizontal lines. Some sources mention Ren-13 which corresponds with the vertex, and Ren-2 that forms the caudal end as the upper and lower points of the vertical line. It uses points along the Ren, Kidney, and Stomach and Spleen meridians primarily. There are also eight specific abdominal acupuncture (Ab) points that are unique to this system. All body parts and organs can be treated by needling within this small area.

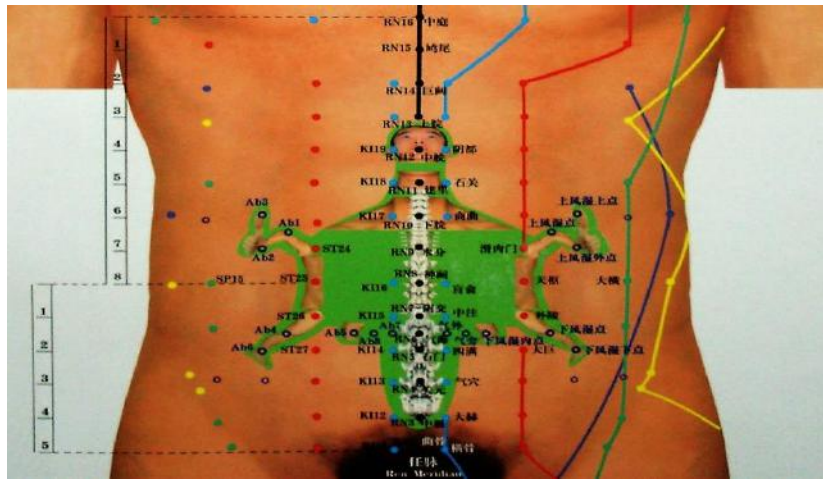


Fig 2-29. Abdominal acupuncture chart of the turtle

The Three Layers of the Abdomen in AA

1. **Heaven / superficial level:** This level lies just under the skin and treats all kinds of pain in all regions. It is represented by a hologram of the turtle / tortoise and it contains Bo's new abdominal points (Ab 1-8). It is the most frequently used layer and is the main focus of this chapter. (Fig 2-30)

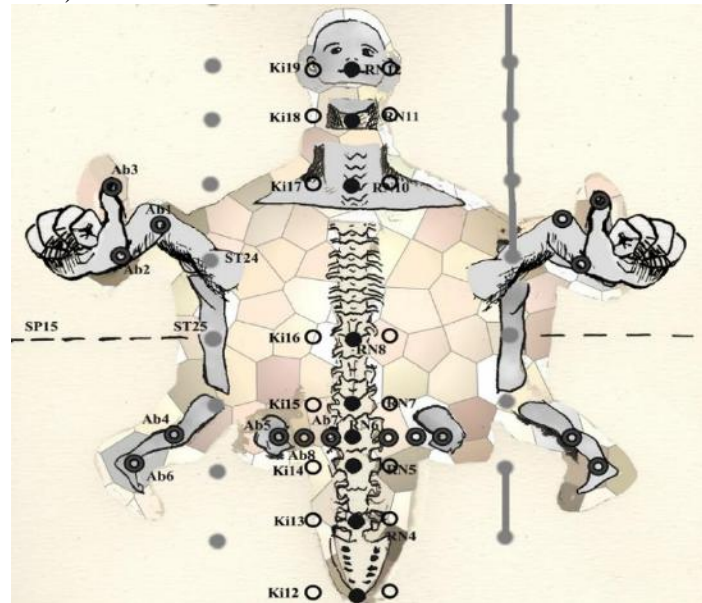


Fig 2-30. Abdominal acupuncture chart of the turtle (Superficial Layer)

2. **Humanity / middle level:** It is found in the fat layer and connects the internal and external. It forms a connection between the congenital and the acquired AMS. It is based on the Jing Lou theory²⁰ and uses standard primary and extraordinary meridians to treat the body. (Fig 2-31)

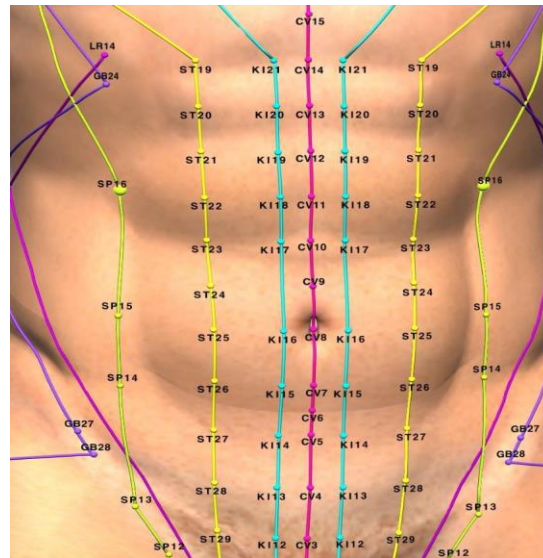


Fig 2-31. Abdominal Acupuncture Meridian Chart (Middle Layer)

3. **Earth / deep level:** It is located in the muscle layer on the acquired (postnatal / second) AMS. It treats the Zang Fu organs and viscera and chronic conditions. It is represented by the Ba Gua²¹ / 8 trigrams (Fig 2-32).

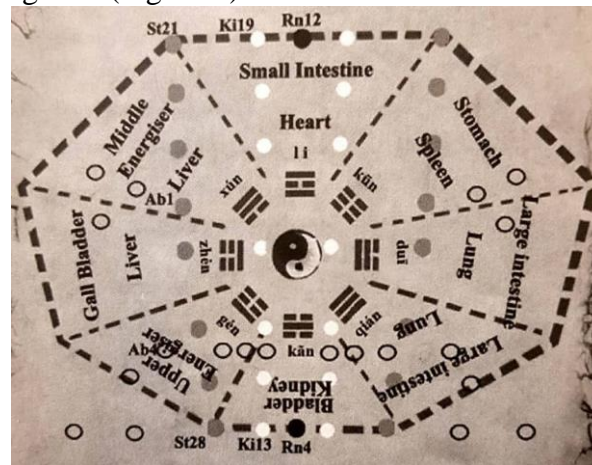


Fig 2-32. Abdominal Ba Gua (Deep Layer)

²⁰ - Jing Luo are the main channels of communication and energy distribution in the body. They link interior Zang Fu organs with various tissues of superficial areas of the body. In this way, they allow for internal adaptation to external change.

²¹ - An important **Chinese symbol**, the **Ba Gua** is an 8-sided shape that is made of 8 trigrams. It has the yin and yang symbol at the center and the eight trigrams are arranged around it to complete the octagonal figure. It is a system for organizing and understanding the forces of nature. These eight trigrams are Heaven, Earth, Water, Fire, Wind, Thunder, Mountain and Lake. Each trigram consists of a combination of three lines. Each of these lines is either a broken line, representing yin, or an unbroken line, representing yang.

ABDOMINAL ACUPUNCTURE (AA) MAIN POINTS

Main abdominal points (Fig 2-30, 2-33)

- **Ren-12** is located specifically at the mouth;
- **Ren-11** anatomically relates to the 1st cervical vertebra;
- **Ren-10** is located on a level with the 7th cervical vertebra;
- **Ren-9** is equivalent to the 7th thoracic vertebra;
- **Ren-6** coincides with the 1st lumbar vertebra;
- **Ren-4** is the tail of the turtle and relates to the 4th or 5th lumbar vertebra;
- **St-25** relates to the mid back area;
- **Sp-15** is the outer boundary of the turtle;
- **St-24** corresponds with the shoulder. The elbow is found 0.5cun superior and lateral to this, while the wrist is found 0.5cun inferior and lateral to the elbow. This gives the shape of an inverted V;
- **St-26** corresponds with the hip point. The knee is found 0.5cun inferior and lateral to the hip point and the ankle point is on a line 0.5cun lateral and inferior to the knee point. (Hip, knee and ankle should look like a backslash \);
- **Ab1, Ab2, Ab3, Ab4, Ab5, Ab6, Ab7 and Ab8** POINTS that anatomically relate to the elbow (Ab1), wrist (Ab2), thumb (Ab3), knee (Ab4), medial knee (Ab5), Ankle (Ab6), Hip & Lower Back (Ab7) and Abdomen (Ab8) on the turtle hologram.

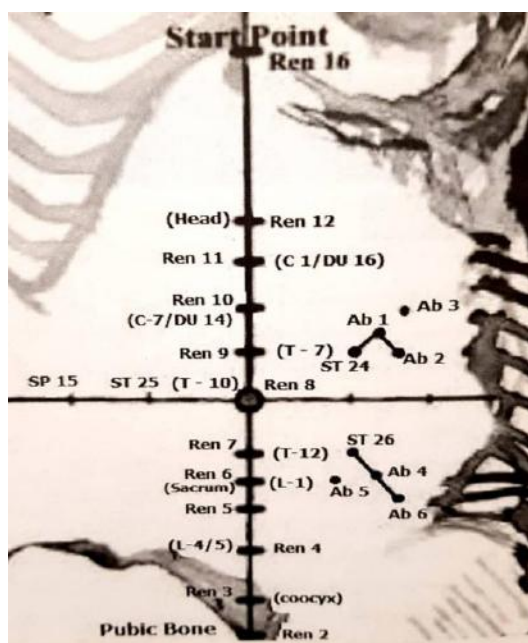


Fig 2-33. Simplified abdominal acupuncture chart of the turtle

GENERAL INDICATIONS OF AA

Abdominal acupuncture can be used to treat all the disorders that traditional acupuncture treats. Abdominal acupuncture has the ability to adjust Zang Fu functions to treat whole-body disease. The purpose of using abdominal acupuncture is to adjust the internal organ functions and to improve these functions to treat disease. Abdominal acupuncture is indicated for any condition in which other acupuncture therapy is indicated, especially for conditions where other techniques have been used with poor results. The indications for abdominal acupuncture are mainly for internal organ disease, long-term illness, or difficult conditions.

- Long-term internal organ disease, such as cerebral brain disease, heart disease, and hypertension
- Internal organ dysfunction, such as tinnitus, insomnia, and emotional conditions
- Short-term disease with internal organ deficiency, such as sciatic nerve pain, arthritis, low back pain, and chronic fatigue syndrome

Abdominal Acupuncture Techniques

Before performing abdominal acupuncture, it is very important to do abdominal diagnosis and carefully check every area of the abdomen for tension of the muscles, pressure pain, and tumors, as well as internal organ abnormalities.

Depth of Insertion

Normally the acupuncturist will divide the abdominal area into three layers: sky (Superficial), human (Middle), and earth (Deep). For new diseases or external conditions, use a superficial insertion at the sky layer. For the disease with a relatively longer period but not involving the internal organs, insert the needle into the middle at the human layer. For long-term illness involving the Zang Fu and internal organs, insert the needles deeply to the earth layer. Musculo-skeletal and sense organ problems are addressed in the sky level and the depth of needle insertion is usually 0.1 to 0.5cun.

Advantages of Abdominal Acupuncture

- Less needle sensation therefore less painful and clients generally prefer it
- AA uses shallow needling so less risk of injury
- AA avoids the necessity to treat injuries where there might be swelling or bandages preventing local access
- Usually abdominal acupuncture achieves better efficacy than other microforms
- It is good for those with a weak constitution
- It can treat a large number of problems at once
- It gives rapid results
- Unlike some stronger acupuncture points, AA is unlikely to cause a client to faint
- AA often gives more profound, diverse and comprehensive side benefits than traditional acupuncture gives

Disadvantages of Abdominal Acupuncture

- It is easier to bruise due to the large number of Blood vessels supplying the area. Bruises tend to be colorful not painful;
- Abdominal acupuncture can take longer to administer if there are a lot of symptoms to be treated.

Cautions

The abdominal area contains many important organs. Before inserting any needles, it is important to do a physical examination of the area. Be careful to avoid large vessels and internal organs. Use the correct depth of insertion with gentle manipulation. If the patient has a prolapsed stomach or a fullness of the urinary bladder, insert the needles carefully.

Contra-Indications

- Pregnancy;
- Enlarged Liver or Spleen;
- Cancer in the areas of Stomach, Pancreas and Liver;
- Peritonitis;
- Scars - If there are scars needle either side of them;
- Venous dilation around the navel;
- Acute unexplained abdominal pain.

ABDOMINAL ACUPUNCTURE FOR HEADACHES AND NECK PAIN

1. Abdominal Acupuncture points connected to Headaches and Neck Pain)

Ren-12, Ren-11, Ren-10, Ren-8, Ren-4, Ren-6, Kid-17, Kid-18 and Kid-19

2. Prescriptions for Headaches and Neck Pain

a. Neck & Upper Back Pain Prescription

- Needle Ren-4, Ren-6, Ren-10, Ren-12 / (Ren-9 for Acute pain)
 - Needle Kid-13 bilaterally (Nourishes Bone Marrow)
 - Needle ST-24 (For Upper Back and over Trapezius Muscle)
 - Needle Ashi Points around Kid-17 (Pain around Trapezius Muscle)
 - Needle Ashi points around Kid-18 (Pain in the point GB-20)
 - Needle Ashi points between Ren-10 and Ren-11 (For C1 to C7).
- **Side of the neck**—Kid-17, St-24
 - **Back of the neck**—Ren-10, Kid-17

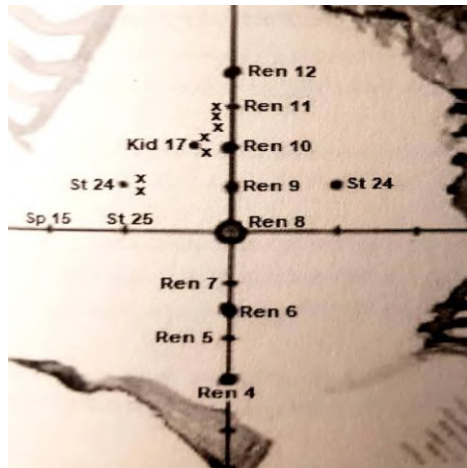


Fig 2-34. Neck & Upper Back Pain

b. Total Headaches Prescription

- Bringing Qi Home (Needle Ren-12, Ren-10, Ren-6, Ren-4)
- Needle Ashi Points above and around Ren-12
- Needle Ashi Points between Ren-11 and Ren-12

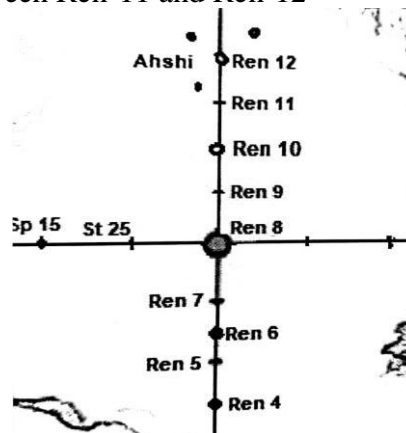


Fig 2-35. Total Headaches

c. Headaches from the Hell Prescription

They are severe headaches with pain behind the eyes. The location of pain is varying from time to time (Pain along Gall Bladder, Urinary Bladder and Stomach Meridians)

- Bringing Qi Home (Needle Ren-12, Ren-10, Ren-6, and Ren-4).
- Needle Ashi Points above Ren-12
- Needle Ashi Points between Ren-11 and Ren-12 (for the pain covering the area from GB-20 to Taiyang)
- Needle Ahshi points around Kid-19 to a depth of approximately 0.2-0.3cun to address the discomfort at GB-20
- Needle Ashi Points between Kid-19 and Kid-20 to treat Frontal Headache (0.1cun) and Occipital Headache (0.3cun)
- Needle Right Ab-1 (relieves liver stagnation)
- Needle ST-24 (moves Qi along stomach meridian up to head)

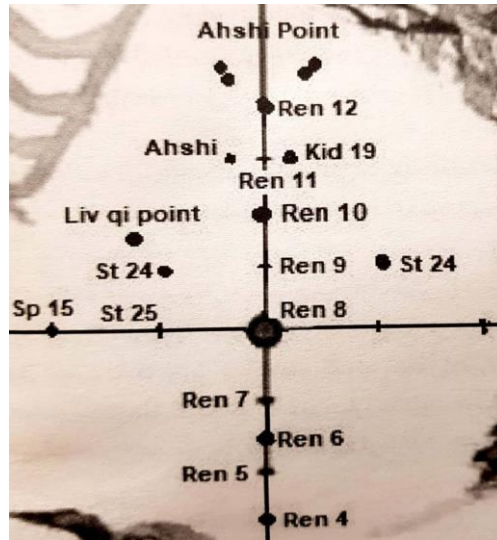


Fig 2-36. Headaches from the Hell

Techniques of Abdominal Acupuncture for Headaches

After all the needles are initially inserted they are put to their correct depth, and any nodes are broken down using a strong manipulation of the needles until they had become less resistant to penetration. Following superficial needling the pain will completely disappear within seconds. After a 30-minute treatment, headache cases usually report that it had given them the best pain relief ever, noting that even opiates had not given such powerful relief. The treatment is completed by setting a course of 12 sessions twice or three times a week.

HAND / FOOT ACUPUNCTURE (SUJOK THERAPY)

Sujok Therapy²² is a medical discovery of great importance for the mankind. It is an extremely effective method of healing that has established an academic foundation which can make a great contribution to the world citizens' medical welfare improvement.

During the years, after the Sujok Therapy had been discovered, professor doctor Park Jae Woo from Korea developed further his elaboration into a universal healing system, called Onnuri medicine. He established that the human hands and the feet are replica of the entire body and exact correspondence of body acupuncture points exists on the hands / feet. It is thus possible to practice acupuncture / acupressure solely on the hands or feet. Sujok is a Korean word meaning hands (Su) and feet (Jok) and sujok refers to stimulating special active points on the hands and the feet that corresponds to all organs and parts of the body.

Hands and Feet have a proper cure system for treating the diseases of human body based on the body correspondence principle. Hands and Feet have the closest resemblance to the human body. Particularly hands are too closely similar to the human body in terms of shape. Such resemblance aims at the prevention and cure of disease for our health.

All body correspondence system including hands and feet play the primary role of taking care of the health of the human body. While the other correspondence systems are designed to prevent or cure diseases only by natural friction or stimulus which takes place while leading a daily life, hands and feet correspondence system are equipped with particular structural conditions, very similar to the human body, which can exactly cure the diseases of all parts of the body by giving intentional stimulus together with natural stimulations.

As natural friction and stimulus of the correspondence cure systems accompanied by daily life are not sufficient to perfectly prevent and cure disease, it would have been necessary for the hand and foot correspondence systems to exist which can positively cure the diseases by giving artificial stimulus precisely.

Special Features of Sujok Therapy

- It can be practiced as a main and only healing method for serious, acute or chronic diseases but only under medical control.
- It can be used as a first aid by emergencies before someone from medical services arrives.
- The Sujok Therapy has no contra-indications and secondary effects and can be used by everyone without health risk. But there are some conditions with which this therapy will not be sufficiently effective or won't be wisely to be practiced.

²² - Sujok Therapy has a broader meaning than just making use of needles and includes stimulating the points by different methods such as seed therapy, magnet therapy, electrotherapy, massage, moxa and acupuncture.

Principal Virtues of SUJOK Therapy

- **High Effect:** When applied properly, a pronounced effect is often felt within a few minutes, sometimes even seconds.
- **Totally Safe Usage:** This system of treatment is not man-made and its origins are in nature. It is drugless with no side-effect. That is why the system is powerful and safe.
- **A Universal Method:** Sujok therapy can be applied to any part of the body, any organ and any joint.
- **Accessible to everybody:** Sujok therapy is easily learned and memorized and once grasped, stays usable lifelong.
- **Simple Application:** Your hands and your knowledge are always with you and you will have no difficulties in finding a suitable material for treatment

INDICATIONS OF HAND / FOOT ACUPUNCTURE

A. Indications of Hand Acupuncture

1. Hand acupuncture is highly effective at relieving pain, especially acute pain due to sprained muscles and tendons, nerves, sprained ankle pain, sciatic nerve pain, acute low back pain, neck pain, headache, dysmenorrhea, and stomach pain.
2. Hand acupuncture is also effective for treating insufficient lactation, spasms of the eye muscles, and spasms of the abdomen and stomach.
3. Hand acupuncture can be used in conjunction with body acupuncture for symptoms such as cough, asthma, palpitations, headache, dizziness, diarrhea, and abdominal pain.

B. Indications of Foot Acupuncture

1. Foot therapy provides a holistic result. Stimulating specific points on the feet can have the effect of regulating Zang Fu function through the meridian systems. This therapy can improve the immune function to help the body fight and recover from disease.
2. Foot acupuncture can be used to treat various diseases, especially internal organ disorders. The results are especially effective with nervous system, urinary, and endocrine system disorders. In most cases, patients with a common cold, red and painful eyes, toothache, cough, asthma, tinnitus, stomach pain, urinary retention, stroke, high fever, or coma will have positive results with this therapy.

Contra-indications

- During or after excessive alcohol or drug use.
- With a strong fatigue, insufficient sleep, or starvation.
- When the disease is acute and is not medically diagnosed.
- Immediately after finishing a lavish meal.
- During the last three months of the pregnancy.

CORRESPONDENCE SYSTEMS AND ZONES

The correspondence systems are informative, power producing projections of the organism located on all independent parts of the body. They look like reduced images of the human body, so deformed that to build in the form of the appropriate body parts. Since each correspondence system is a reduced image of the organism, all the organs, all parts of the body are represented in it. The zones of the correspondence system, which correspond to the particular parts of the organs are called *correspondence zones*. Each organ and part of the body has their own correspondence zone in all correspondence systems.

When an organ gets diseased, in all other correspondence systems a signal concerning the disorder is received. The correspondence systems react as one or more miniature spherical formations in the correspondence zone tissue of the diseased organ, are formed in them. When pressed they are painful and are subjectively felt as pain points. For example, if the kidney gets diseased, pain points appear in its correspondence zones located on the ears, hands, feet, tongue, nose, fingers and all other independent parts of the body.

Among different correspondence systems, hands and feet have the strongest resemblance to the human body (Fig 2-37), so are most efficient and can create healing impulses most successfully. In addition, they get most often into contact with the environment, thus creating healing impulses most often.

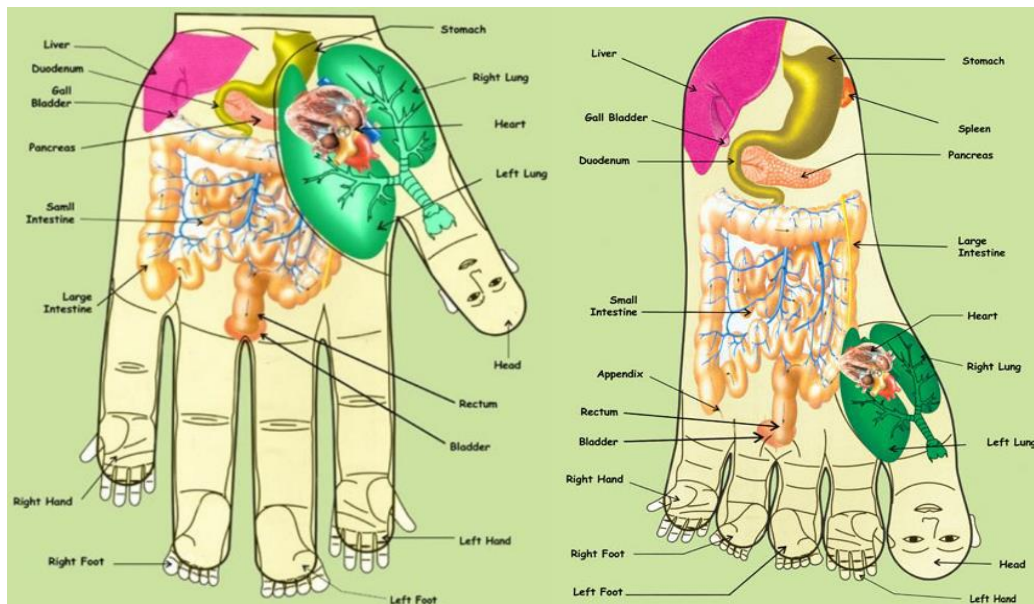


Fig 2-37. The Standard System of Correspondence of the Hand and Foot

The Sujok Therapy has entirely been created on the basis of the correspondence systems located on the hands and feet. It consists of two levels. The first level is easy to use by people without medical education and includes several healing correspondence systems. From practical point of view, the most important are two of them:

- *Main Correspondence System*
- *Insect Correspondence System*

MAIN CORRESPONDENCE SYSTEM

The hands and feet structure is almost identical with the structure of human body. The correspondence zones of the organs and parts of the body for the hands and feet in Main Correspondence System (Fig 2-38) are as follows:

- The thumb corresponds to the head and neck.
- The second and fifth fingers correspond to the upper limbs.
- The third and fourth fingers correspond to the lower limbs.
- The knuckles correspond exactly to the joints of the limbs.
- The palm, the foot and their backs correspond to the torso.
- The correspondence zones of the internal organs are located on the palm and foot.

When a man falls ill, one or more pain points (Sujok Acupoints) appear on the hands and feet in the correspondence system of the diseased organ. The stimulation of these zones has a clear healing effect.

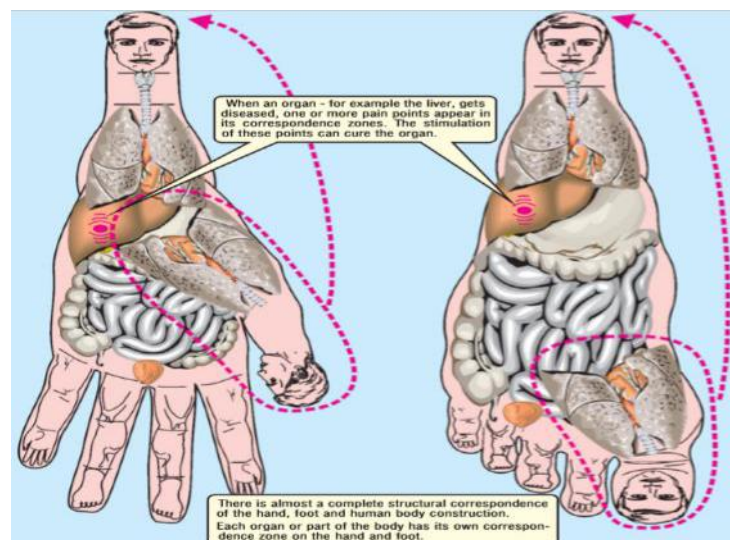


Fig 2-38. The correspondence zones in Main Correspondence System

INSECT CORRESPONDENCE SYSTEM

The fingers and toes are independent parts of the body as well as the entire hands and feet. On each independent body part and hence on each finger and toe a healing correspondence system, similar and corresponding to the human body is located. Each organ or part of the body has its own correspondence zone on the correspondence system of each finger or toe. The stimulation of these points has the same healing effect as the stimulation of the pain points in the Main Correspondence System. The Insects' bodies consist of three parts: head, chest, stomach. In the same way the correspondence systems on the fingers and toes are located. (Fig 2-39)

- On the distal (first) phalanx of the fingers and toes the head and neck are projected.
- On the middle (second) phalanx the breast-cell is projected.
- On the proximal (third) phalanx the stomach area is projected.
- The upper limbs are projected in bent position in the side parts of the middle phalanx of the fingers and toes.
- The lower limbs are projected in bent position in the side parts of the third phalanx.

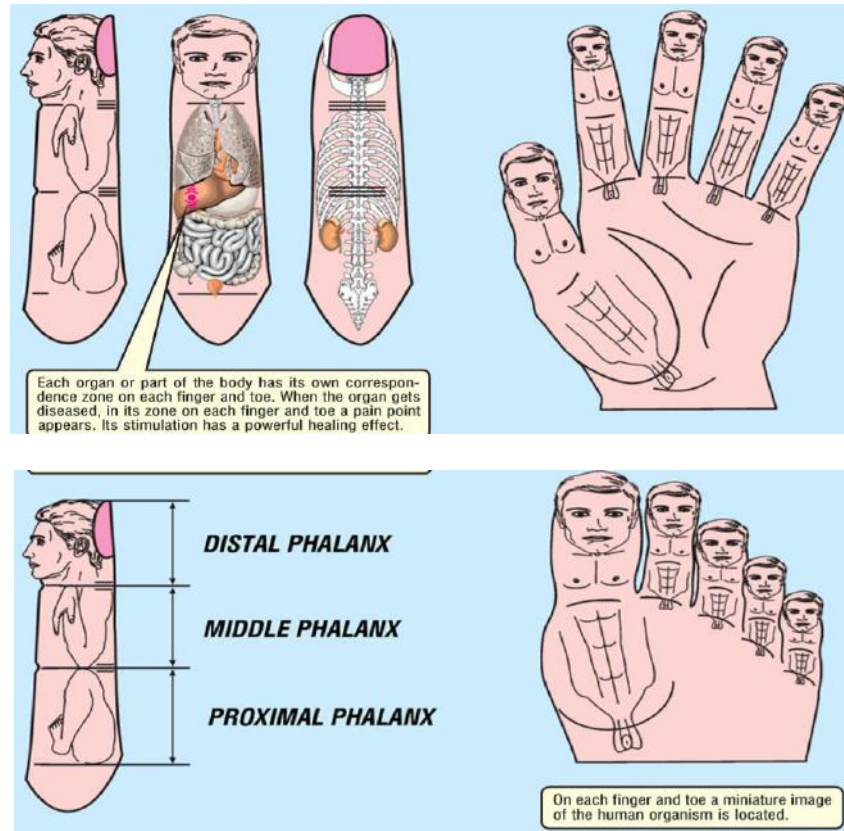


Fig 2-39. The correspondence zones in the 'Insect' Correspondence System

PRIMARY AND SECONDARY ZONES OF CORRESPONDENCE

The body has two vertical halves - left and right. In the same way each correspondence system has left and right half, corresponding with the left and right body half.

The position of left and right half in the main correspondence system: It is when the hands (feet) and fingers (toes) are directed downwards and the palms (feet) are turned forward. As it is, on the right halves of the hands (feet) the right body half is projected and on the left halves – the left body half.

The position of left and right half in the 'insect' correspondence system: It is when the hands (feet) and fingers (toes) are directed upwards and the palms (feet) are turned forward. As it is, in the right halves of the fingers (toes) the right body half is projected and in the left halves – the left body half.

Primary and secondary zones: The correspondence zones which are on the side of the organ, are called primary zones and those on the other side – the secondary zones.

Example 1: The liver, gallbladder, right leg, right arm, right eye, right ear etc. are organs located on the right body half. That is why their primary correspondence zones are on the right hand (foot), and their secondary correspondence zones are on the other side – on the left hand (foot).

Example 2: The heart, spleen, left leg, left arm, left eye, left ear etc. are in the left body half. That is why their primary correspondence zones are on the left hand (foot), and their secondary correspondence zones are on the other side – on the right hand (foot).

The primary correspondence zones are closer to the organs they correspond with and that is the reason for their greater effectiveness. They have priority when you choose a zone for stimulation.

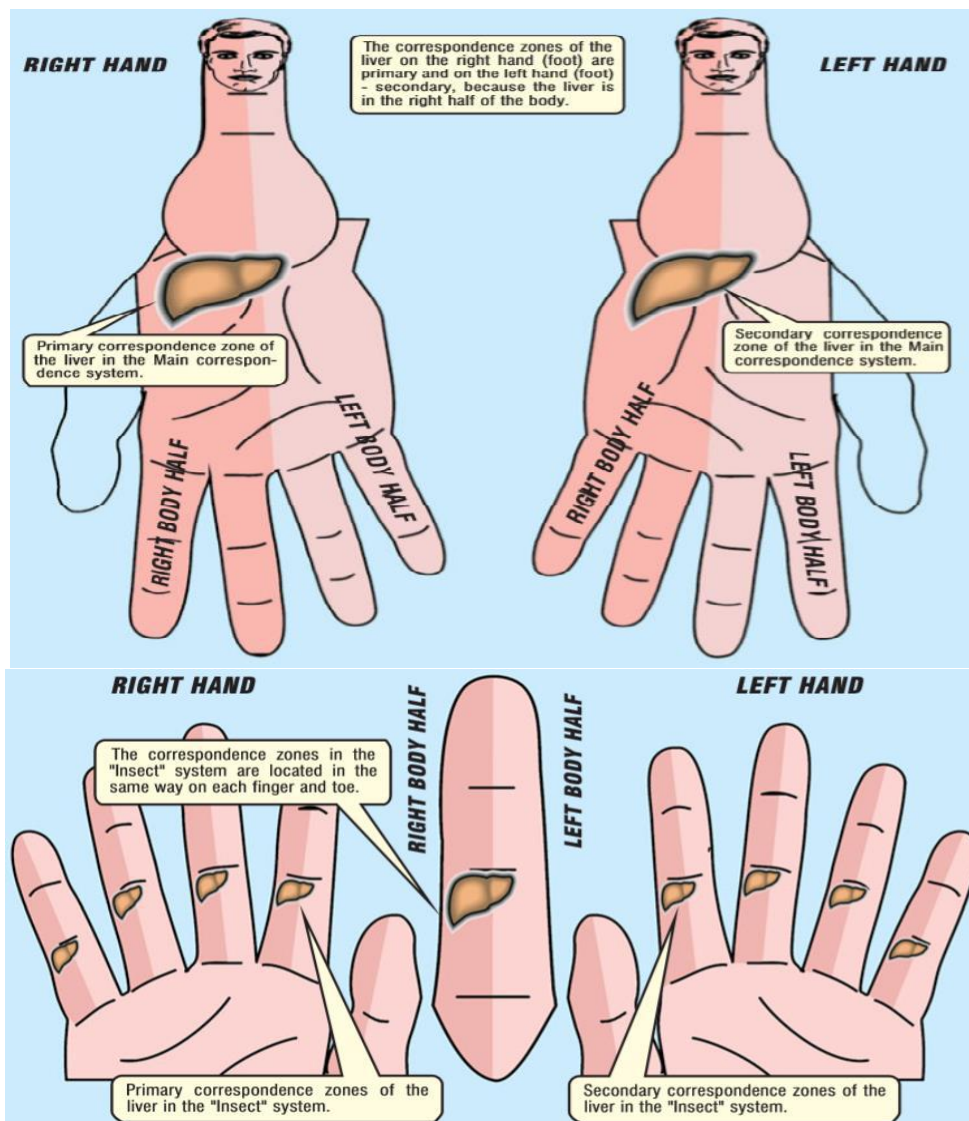


Fig 2-40. Primary and secondary zones of correspondence

PRESCRIPTIONS

There are many prescriptions in sujok therapy for different areas of the body. The prescriptions are presented for the diseases in the areas of head and neck, face, brain, sinuses, eyes, ears, teeth, thorax, the spine, lungs and bronchi, abdomen, lower and upper extremities, also the diseases of the heart, the stomach, large and small intestine, the pancreas, the liver, the internal glands, vagina and uterus, male genitals and prostate, the bladder and the kidneys based on the correspondence systems and zones. As the description on all these sujok treatments is very extensive and nearly further than the subject areas of this essay, we confine our prescriptions to just the headaches and the pain in the area of the face and neck.

SUJOK THERAPY FOR THE PAIN IN THE AREA OF HEAD AND NECK

(Headaches and Neck Pain)

Headaches are among the diseases that can be relieved by practicing Sujok Therapy. In the following, we represent the methods of treating the headaches and neck pain.

The correspondence zones of the organs, forming the head (brain, eyes, ears, nose, mouth etc.) on the higher and lower projections (Dorsal and palmar sides of the hands / Dorsal and plantar sides of the feet). Therefore, to treat the diseases in this area, we have to stimulate the relevant sujok points locating on the higher and lower projections of fingers and toes by needles or other methods of Sujok Therapy. The most important projections of the head are located on the thumbs and the big toes. (Fig 2-41)

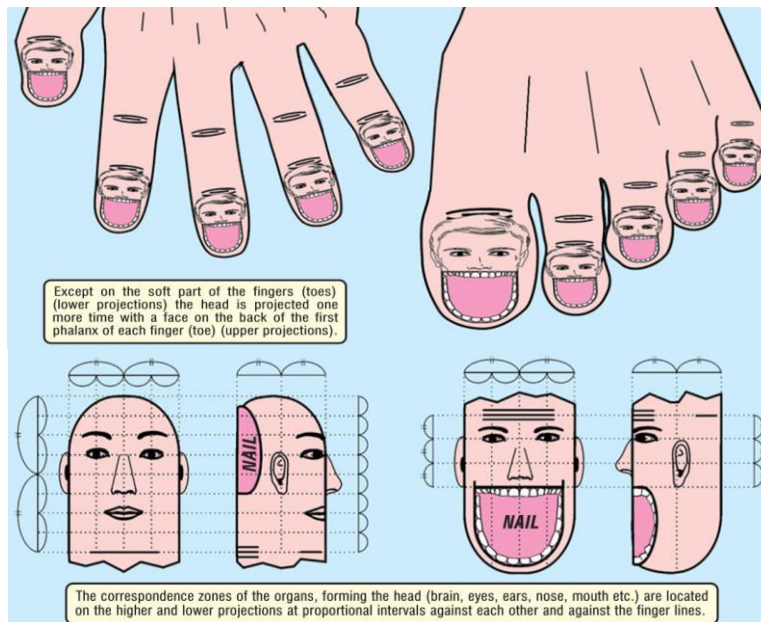


Fig 2-41. Double projection of the head on fingers (toes)

Diseases in the area of Head and Neck

For Headache and Neck Pain, the areas of the Main Correspondence System and the Insect Correspondence System for the head and neck are stimulated by needles or other methods of Sujok Therapy. (Fig 2-42. and 2-43)

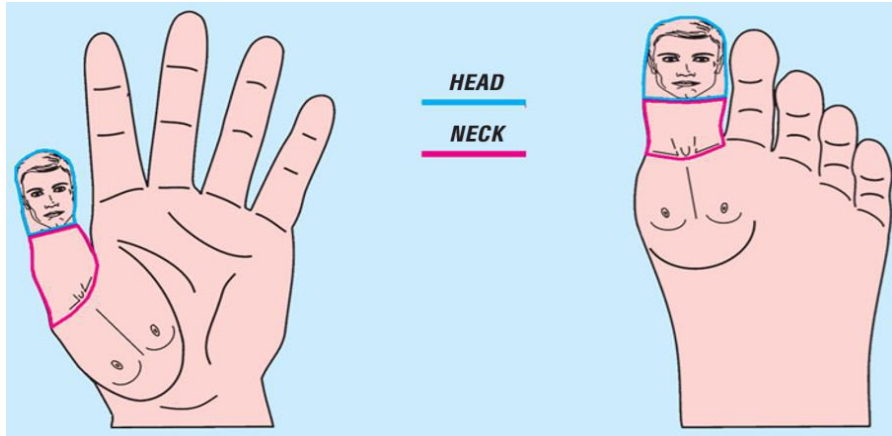


Fig 2-42. The Main Correspondence System of the Head / Neck

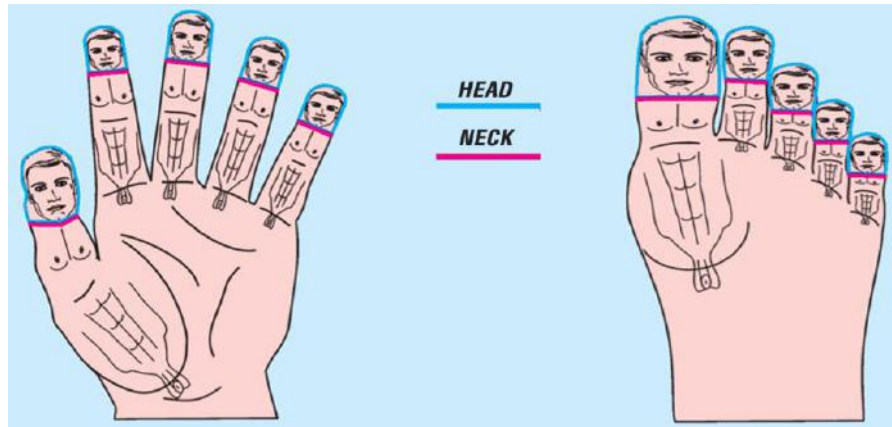


Fig 2-43. The Insect Correspondence System of the Head / Neck

Diseases in the area of the Brain – Right hemisphere

When the origin of the headache is the brain, areas of right or left side of the brain is stimulated. Here the correspondence zones of the right hemisphere are illustrated. In addition, the brain is an additional zone for treating every other disease. (Fig 2-44)

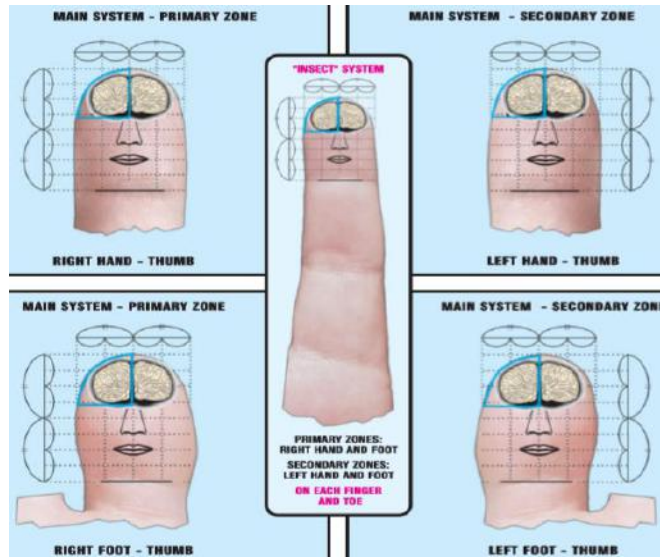


Fig 2-44. Main and Insect Correspondence Zones of the right hemisphere of the Brain

Diseases of the Eye – Right Eye

There is sometimes eye pain accompanying particular types of headaches. In this case the zones of the eyes are needed in addition to the head zones. Eye pain may be also a separate single condition to be treated by Sujok Therapy. (Fig 2-45)

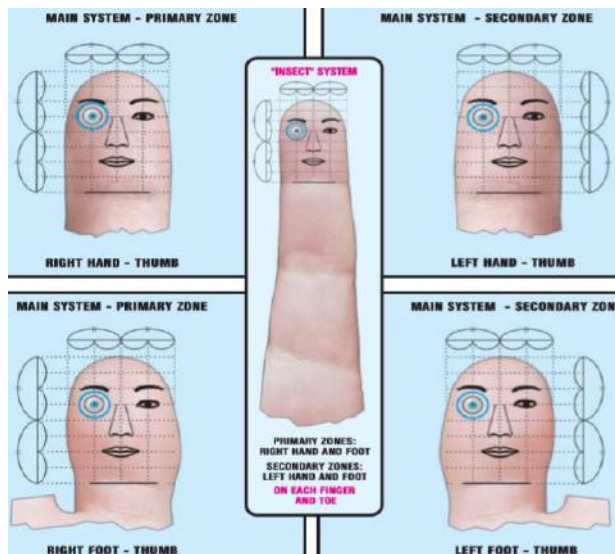


Fig 2-45. Main and Insect Correspondence Zones of the right eye

Diseases of the Sinuses – Right side

Sometimes the headache is caused by Sinusitis especially by the inflammation of the frontal sinuses. In this case, the zones representing the sinuses should be needled or treated otherwise. (Fig 2-46)

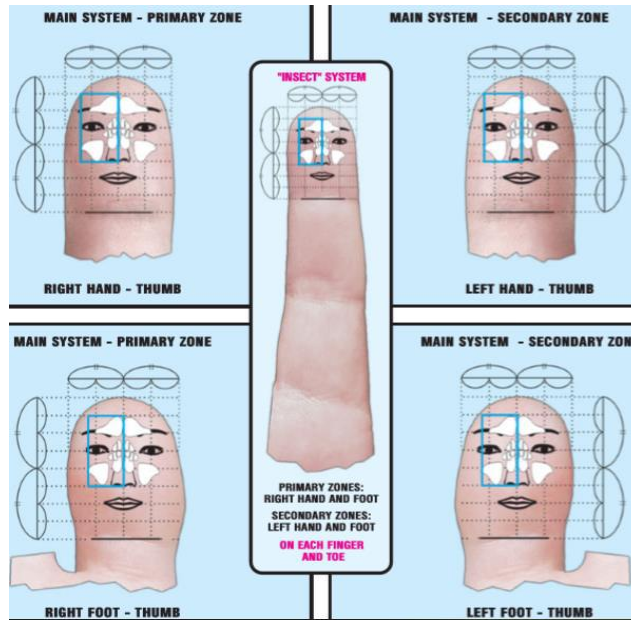


Fig 2-46. Main and Insect Correspondence Zones of the Sinuses – right side

Diseases of the Neck Tissues – Right side

The skeletal or muscle disorders in the neck area is one of the most important causes of the most types of headaches. These types of headaches are called cervico-genic. For cervico-genic types of headaches and Neck pain or Neck stiffness itself, we treat the zones representing the neck. Based on the part of the neck involved, we may treat the anterior or posterior, the right or the left, the lateral, and / or the cervical spine correspondence zones. (Fig 2-47, 2-48, 2-49)

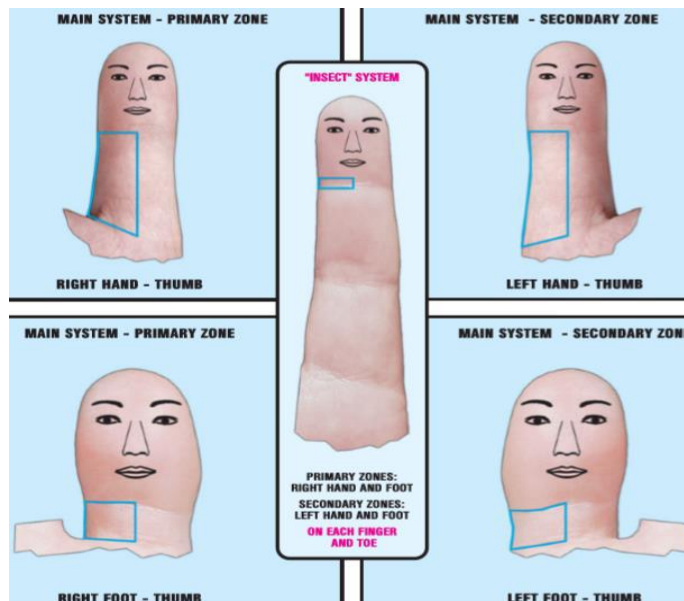


Fig 2-47. The main and insect correspondence zones for right side of the anterior part of the neck

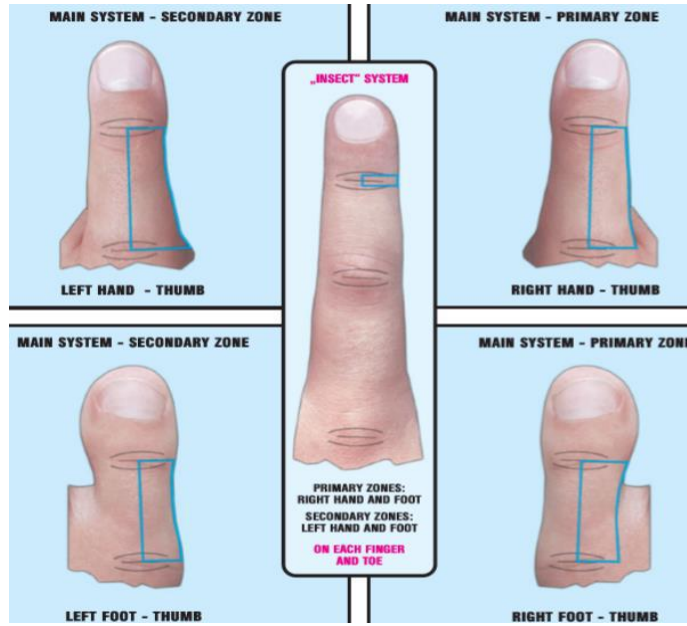


Fig 2-48. The main and insect correspondence zones for right side of the posterior part of the neck

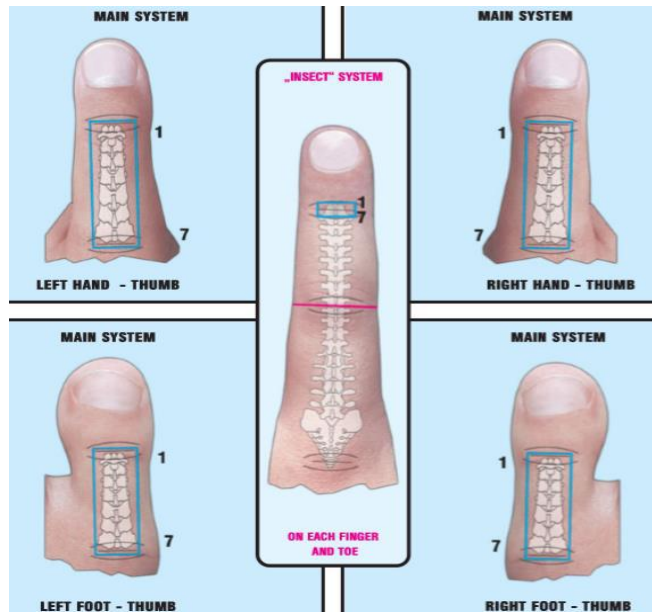


Fig 2-49. The main and insect correspondence zones for the cervical spine

Practical Examples

Right Side Headache (Prescription 1)

- Four needles on the pain points of the primary correspondence zone of the head / brain on right thumb / big toe (Main System). (Fig 2-50)

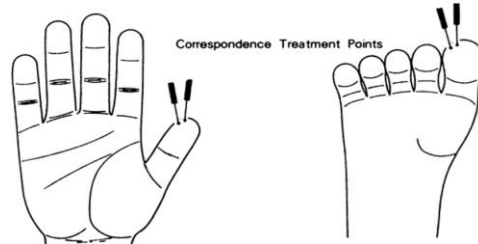


Fig 2-50. Right Side Headache (Prescription 1)

Right Side Headache (Prescription 2)

- Four needles on the pain points of the primary correspondence zone of the head / brain in the right hand (Two on the right thumb / Two on one finger). (Fig 2-51)

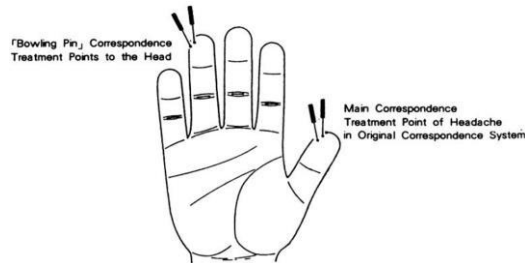


Fig 2-51. Right Side Headache (Prescription 2)

Left Side Migraine

- Eight needles on the pain points of the primary and secondary correspondent zones of the brain in thumbs and big toes (Two needles on each one). (Fig 2-52)

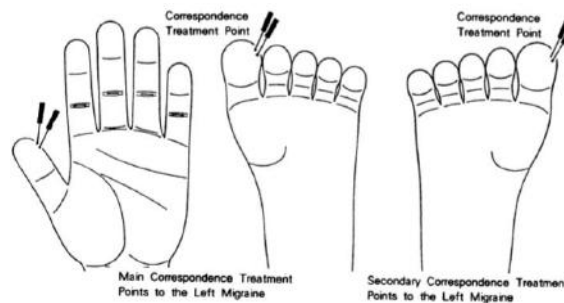


Fig 2-52. Left side migraine

TECHNIQUES OF SUJOK THERAPY FOR HEADACHES

The treatments of Sujok Therapy are mainly applied by Needle Stimulation (Acupuncture needle technique). Choose a very comfortable position for the patient. Use a 30 to 34-gauge filiform needle that is 0.5 to 1.0 cun in length. Insert the needle perpendicular to the skin. Needle to a depth of 0.1 to 0.3 cun on the fingers or toes or up to 0.5 to 0.8 cun on the palm and dorsal area. For acute conditions, retain the needles for 3 to 5 minutes or up to 20 to 30 minutes.

OTHER TECHNIQUES OF SUJOK THERAPY FOR HEADACHES

- Press Needle Stimulation
- Needle Roller Stimulation
- Electrical Current Stimulations (TENS, FARADIC, IDC)
- Electro-acupuncture Stimulation
- Hot Stimulation (Moxa)
- Cold Stimulation (Cryotherapy)
- Combined stimulations with needles and moxa
- Magnet Stimulation
- Laser Stimulation
- Massage or press Stimulation
- Pressing with Seeds or Pellets
- Pressing with Stick or Probe
- Pressing with a roller or elastic ring

Schedule of the Treatment

Based on the severity of the pain and the quality of the response from the patient, one to three healing courses of 10 procedures with a break of two weeks is needed. The treatment should be continued until the patient feel that the condition is stable.

MASTER TUNG ACUPUNCTURE

Tung's acupuncture is a complete acupuncture tradition that predates the traditional 14 channels system. It is well known for its unique set of points, being a complete system that includes its own channels, unique points and needling techniques. Tung's acupuncture is based on the five elements and on a five zang (and six fu) channel system, different from the traditional 14 channels of acupuncture. Each point has its own pathway which directly connects to the five zang and six fu. There are hundreds of Tung's unique acupuncture points distributed mostly on the extremities of the body.

LÌ GĀN JIÀN YǐNG (立竿見影) is a Chinese expression that is very appropriate for Tung's Acupuncture. It can be translated as "Stand a pole under the Sun and immediately see its shadow". In other words, you should get "immediate results".

Characteristics of Tung's Acupuncture

Tung's Acupuncture focuses on the balancing of qi (yang) and blood (yin), so it seldom relies on needling local points or ashi points. Typically, points are needled on the four extremities, the ear, the face and the head. This method can treat disease located anywhere in the body. This method became famous for using only a few needles with miraculous results. The points were often referred to as "magic" because they had instant and long lasting effects. Being so quick in their delivery and effect, it allows the acupuncturist to see numerous patients in a short time. No other school of acupuncture can surpass its effectiveness. Tung style acupuncture does not need the use of the diagnostic methods (pulse, tongue etc.) or terminology adopted by the TCM acupuncture. It is very safe since most of its points are located on the body's extremities.

Tung's Acupuncture Principles

- Local areas never needled.
- Needles are never inserted at the site of pain or injury.
- Fewer needles.
- Distal treatment – the most distal the better.
- Bilateral needling for treating chronic conditions.
- Contralateral needling for pain or structural problems.
- Mirror rule – pricking the upper part to cure the lower disease, and pricking the left side to cure the right. Other conditions of needling in an opposing manner in Tung's acupuncture are illustrated in Fig 2-53.

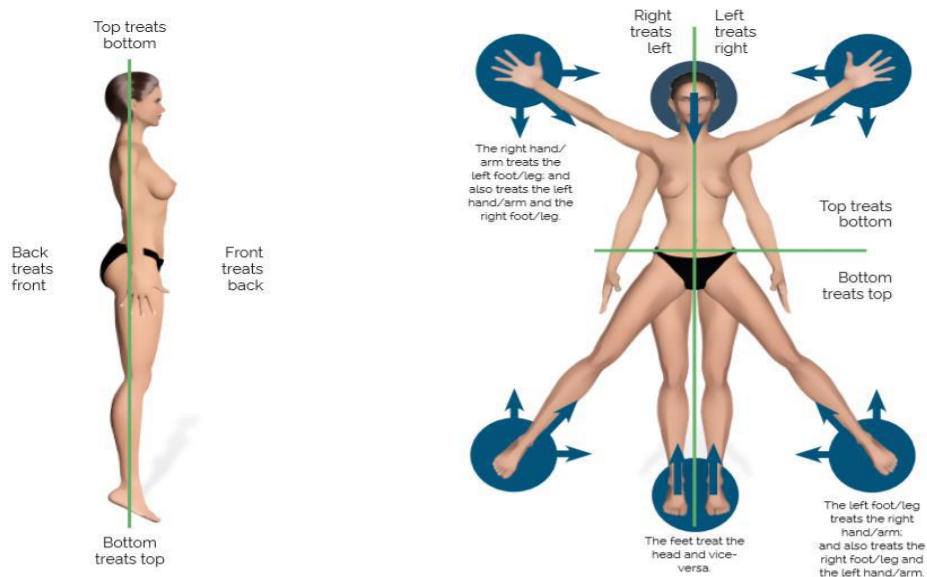


Fig 2-53. Needling in an opposing manner in Tung's acupuncture

WHAT DISEASES CAN BE TREATED WITH MASTER TUNG ACUPUNCTURE?

- Common cold, Fever, Pneumonia, Asthma, Lung disease, Sore throat, Allergies, Dyspnea, Rhinitis and laryngitis, Tonsillitis, Meningitis
- Pain in the limbs, Swollen and painful joints and bones, Arthritis, Tenosynovitis, Plantar fasciitis, Low back pain, Sciatic pain; Chest pain, Muscle spasm and Cramp, Pain in the shoulders and upper back, TMJ dysfunction, Neck pain, torticollis, Lower and upper back vertebral pain; Pain from traumatic injuries, Facial paralysis
- Heart palpitations, High blood pressure, Arteriosclerosis, Fainting, Bleeding disorders, Nose bleeding
- Frequent urination, Incontinence, Impotence, Premature ejaculation
- Uterine pain, Menstrual disorders, Leucorrhea, Difficult delivery (labor)
- Tinnitus and dizziness, Vertigo, Deafness
- Generalized pain, Migraine, Headache, Toothache
- Vision problems, Diseases of the eyes, Astigmatism
- Digestive problems, Constipation, Stomachache, Abdominal pain, liver and stomach disease, Vomiting, Gastritis
- Skin diseases
- Hormonal disorders
- Psychological disorders, Anxiety, Hysteria, Insomnia

Theoretical Basis of Master Tung Acupuncture

(Holographic Theory)

The word “holographic” comes from the Greek “holographos” (literally “written in full,” from holos “whole” + graphos “written”). The Holographic Theory in acupuncture states that a small part of the body can treat larger areas of the body. Ear and abdominal acupuncture, Korean hand acupuncture are examples of holographic systems, since they can treat the whole body.

An important example of holography in Tung’s acupuncture is the second metacarpal bone. There are four points on the lateral side of the bone that can treat a large area of the body. LÍNG GŨ and DÀ BÁI, the two very commonly used points, are among them.

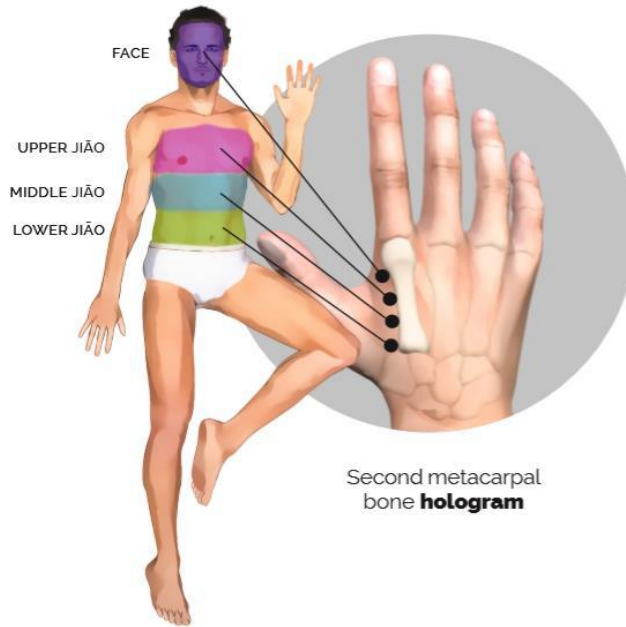


Fig 2-54. Hologram of the face, upper, middle and lower jiaos

Zones Distribution

There is a numbering convention created for Non-Chinese practitioners which helps locating the area in which the point is. The sequence is related to the order in which the points were presented in Tung’s original 1973 book, “Tung’s Regular Meridian and Points”.

Zone 1 is the fingers, zone 2 is the dorsum and palm of the hands, zone 3 is the forearms, and so on. The distribution for the other zones is illustrated in Fig 2-55.



Fig 2-55. Master Tung Zone Distribution

Traditionally, when the point's numbers are setup, the zone number is “doubled”. This means that zone 1 becomes 11 (one-one), zone 2 becomes 22 (two-two), all the way to zone 1010 (ten-ten). For example, the point DÀ BÁI is numbered 22.04, meaning it is the fourth point on the hand. Point HUŌ YǐNG is 66.03, the third point on the dorsum of the foot.

MASTER TUNG’S TOP POINTS
(The Points with the most application)

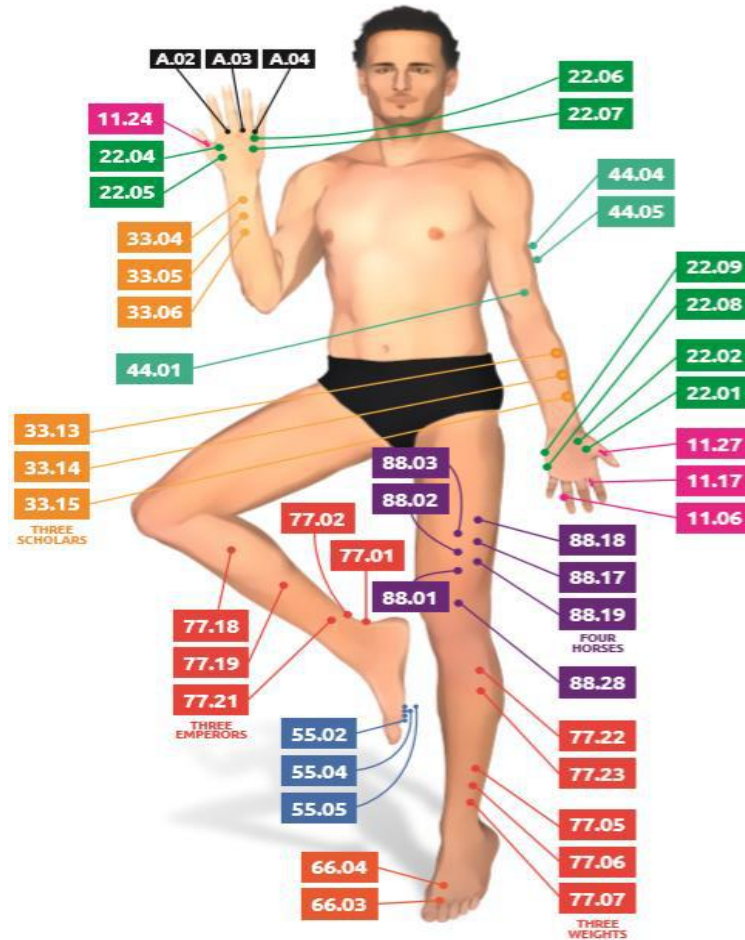


Fig 2-56. Master Tung’s Top Points

As mentioned earlier, lots of diseases can be treated by needling the Master Tung’s Acupuncture points. Here, we review the points effective for headaches.

MASTER TUNG'S ACUPUNCTURE FOR HEADACHES

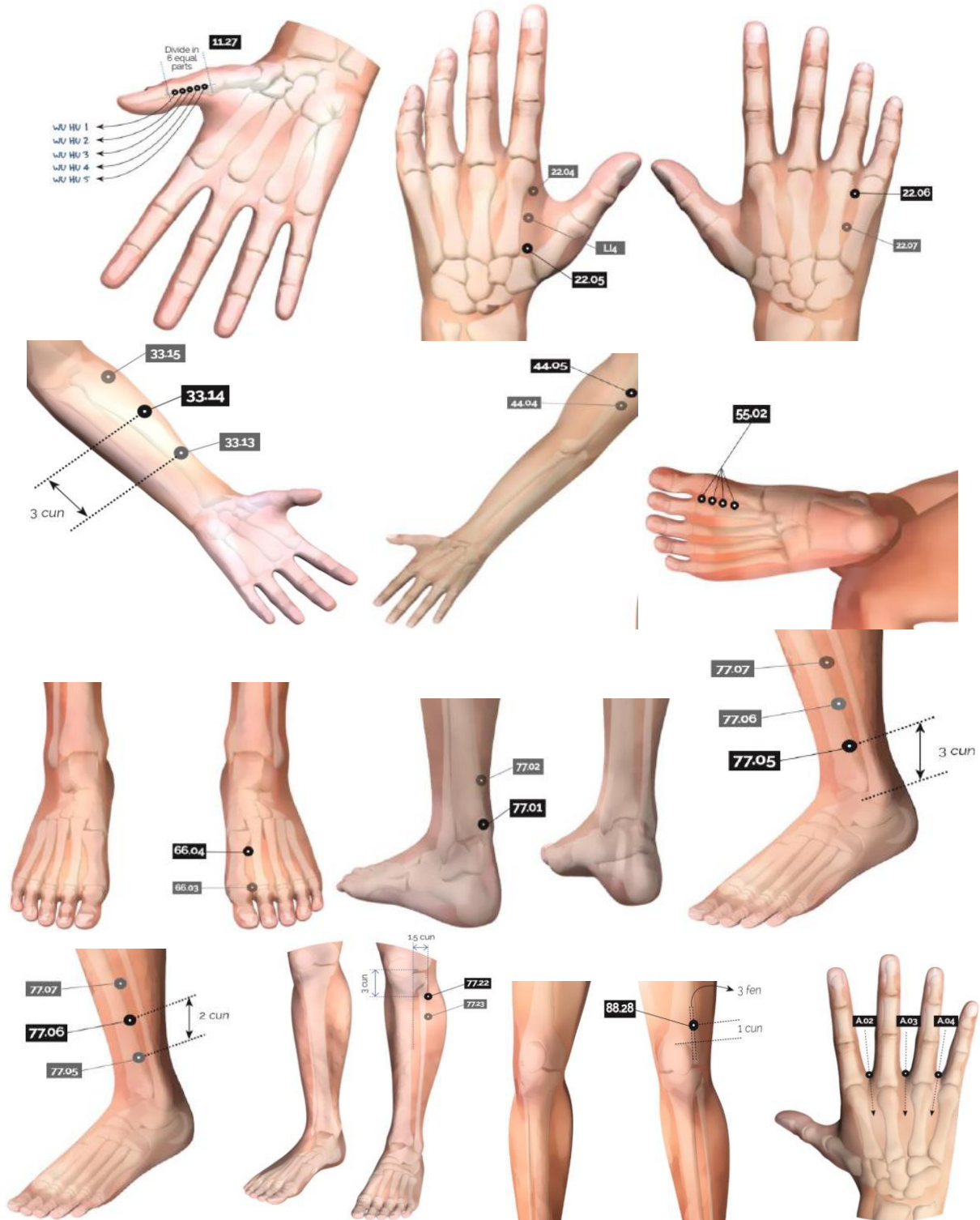


Fig 2-57. Master Tung's Acupuncture Points for Headaches

11.27 (Wŭ Hǔ / FIVE TIGERS): 11.27 is a 5-point unit. Among the 5 points, WU HU-1 and WU HU-3 are needled to treat HEADACHE.

22.05 (Líng Gǔ / SPIRIT BONE): 22.05 is a useful point for Migraine Headaches.

22.06 (Zhōng Bái / MIDDLE WHITE): 22.06 is a Master Tung point for FRONTAL HEADACHE and HYPERTENSION.

22.07 (Xià Bái BELOW WHITE): 22.07 is a Master Tung point for FRONTAL HEADACHE and HYPERTENSION.

33.14 (Dì Shì / EARTH SCHOLAR) / ONE OF THREE SCHOLARS: 33.14 WHEN NEEDLED SUPERFICIALLY, TREATS HEADACHE.

44.04 (Fù Dǐng / WEALTH TOP): 44.04 is one of Master Tung points for Headaches and High blood pressure.

44.05 (Hòu Zhī / BACK BRANCH): 44.05 is selected to treat Headache, Dizziness and High blood pressure. Together with 44.04 treats neck aching and pain and facial paralysis.

55.02 (Huā Gǔ Yī / FLOWER BONE ONE): 55.02 is a 4-point group and useful for relieving Headaches, Toothache, Nasal pain and DISEASES OF THE EYES.

66.04 (Huǒ Zhǔ / FIRE GOVERNOR): 66.04 IS GOOD FOR HEADACHE AND DIZZINESS.

77.01 (Zhèng Jīn / CORRECT TENDON): 77.01 is a Master Tung point particular to Neck pain and torticollis.

77.02 (Zhèng Zōng / CORRECT ANCESTOR): Like 77.01, 77.02 is another point particular to Neck pain and torticollis.

77.05 (Yī Zhòng / FIRST WEIGHT) / ONE OF THREE WEIGHTS: Migraine and Facial hemi-paralysis are treated by needling the point 77.05.

77.06 (Èr Zhòng / SECOND WEIGHT) / ONE OF THREE WEIGHTS: Migraine and Facial hemi-paralysis are treated by needling the point 77.06.

77.07 (Sān Zhòng / THIRD WEIGHT) / ONE OF THREE WEIGHTS: Migraine and Facial hemi-paralysis are treated by needling the point 77.07.

77.22 (Cè Sān Lǐ / BESIDE THREE MILES): Headache, Toothache and Facial paralysis are treated by needling the point 77.22.

77.23 (Cè Xià Sān Lǐ / BESIDE AND BELOW THREE MILES)

- Headache, Toothache and Facial paralysis are treated by needling the point 77.23.
- 77.22 AND 77.23 COMBINED CAN ALSO TREAT MIGRAINES AND TRIGEMINAL NEURALGIA.

88.28 (Jiě / TO UNTIE): 88.28 is an effective point for Generalized pain; so it can also relieve Headaches.

A.02 (SĀN CHĀ YĪ / THREE OPENINGS ONE): A.02 is an Extra Master Tung point that can be used for treating Neck Pain.

A.04 (SĀN CHĀ SĀN / THREE OPENINGS THREE): A.04 is an Extra Master Tung point that can be used for treating Headaches.

Categorization of the points based on the effects they have on different parts of the head, face and neck area

Headache: (Points WU HU-1 and WU HU-3 of 11.27), (22.06 & 22.07), (33.14), (44.04 & 44.05), (55.02), (66.04), (77.18, 77.22, 77.23), (A.04)

Migraine: (22.05), (77.05, 77.06 and 77.07), (Combination of 77.22 & 77.23)

Occiput & Neck Pain / Stiff Neck / Torticollis: (Combination of 44.04 & 44.05), (77.01 & 77.02), (A.02)

Eye Pain / Diseases of the Eyes: (55.02, 55.04 & 55.05)

Earache / Diseases of the Ears: (88.17, 88.18)

Toothache: (55.02), (77.22 & 77.23)

Trigeminal Neuralgia: (77.05, 77.06, 77.07), (Combination of 77.22 & 77.23)

How long should the needles stay in?

After the last needle is inserted, in general, they should be left in for at least 30 minutes. 30–45 minutes is an adequate period of time. It is important to note that the retention of the needles also depend on personal (strong/weak and young/old), disease (deep/superficial and chronic/acute), seasonal (warm/cold and morning/evening) conditions and individual point properties.

CHAPTER 3

DRY NEEDLING AND AURICULAR ACUPUNCTURE TECHNIQUES FOR HEADACHES

DRY NEEDLING FOR HEADACHES

Dry needling is a therapeutic technique in which a trained physical therapist inserts small, sterile solid filament needles into the skin and muscle directly at a trigger point. This generates a twitch response, helping release muscle tension and pain. The goal is to release or inactivate the trigger points and relieve pain.

Basic concepts and mechanism for the effects of Dry Needling, Pathology in myofascial pain, Indications, Contra-indications, Cautions as well as the regional trigger points and the pain guide for head, neck and facial pain were discussed earlier in this essay. In the following, we discuss the techniques of Dry Needling for the muscles that cause headaches and pain in the area of the neck.

DRY NEEDLING TECHNIQUES FOR HEADACHES

Headache Muscles over Eyes and Eyebrows

1. ORBICULARIS OCULI

This complex consists of three parts, which together form an important protective mechanism surrounding the eye. The parts are Orbital Part, Palpebral Part (in eyelids) and Lacrimal Part.

Referred pain patterns

Palpebral- localized 'searing' pain above eye and up to ipsilateral nostril. **Lacrimal-** into eye, sinus pain, bridge of nose pain.

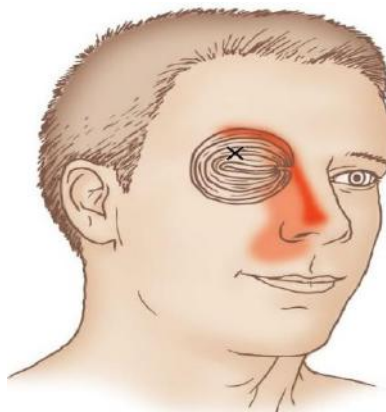


Fig 3-1. Referred pain pattern for Orbicularis Oculi Muscle

Indications: Headache, Migraine, Trigeminal neuralgia, Eyestrain, 'Twitching' eyes, Poor eyesight, Drooping eyelid, Cheek and Sinus pain

Needling Technique: The patient is in supine. With a pincer palpation, the needle is inserted through the skin at a shallow angle while the muscle is fixed between the index and the thumb of the non-needling hand. Then the needle is directed perpendicular from lateral corner of the eyebrow, medially toward the trigger point of the Orbicularis Oculi Muscle (The author's technique) (Figure 3-2)



Fig 3-2. Needling Technique for Orbicularis Oculi Muscle (The model is the author's client)

2. PROCERUS MUSCLE

Referred pain: It is projected over the forehead and deep into the head, inducing frontal headaches.



Fig 3-3. Referred Pain for Procerus Muscle

Indications: Frontal Headaches

Needling technique: The patient lies in supine. The muscle is needled with a pincer palpation. The needle is inserted perpendicular to the skin from superior to inferior, coming from the forehead toward the nose. The needle is inserted through the skin at a shallow angle, and advanced into the muscle belly (Figure 3-4).



Fig 3-4. Needling Technique for Procerus Muscle

Precautions: None

3. CORRUGATOR SUPERCILII MUSCLE

Referred pain: It is projected over the forehead and deep into the head, inducing frontal headaches and pain over eyebrows.

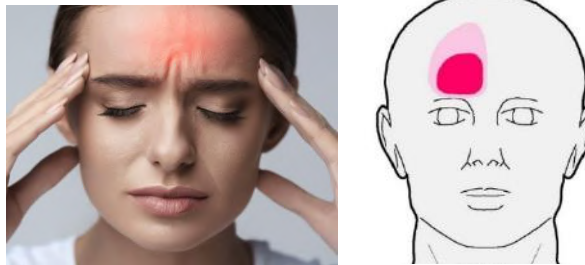


Fig 3-5. Referred pain for Corrugator Supercilii

Indications: Frontal Headaches, Pain over eyes and eyebrows

Needling technique: The patient lies in supine. The muscle is needled with a pincer palpation. The needle is inserted perpendicular to the skin from either the medial or the lateral aspect of the muscle, directed toward its mid-portion. The needle is inserted through the skin at a shallow angle, and advanced into the muscle belly (Figure 3-6).

Precautions: None



Fig 3-6. Needling Technique for Corrugator Supercilii

Headache Muscles covering the Face (Maxilla / Mandible)

1. ZYGOMATIC MUSCLE

Referred pain: It is perceived in an arc close to the side of the nose and up to the forehead.

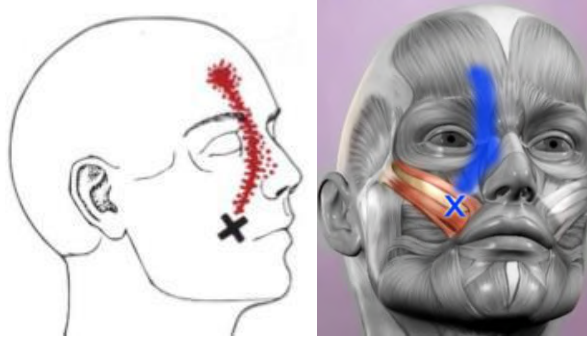


Fig 3-7. Referred pain for Zygomatic Muscle

Indications: Cheek Pain, Dental Pain, Pain in the middle of forehead and eyebrow, Pain around the nose

Needling technique: The patient is in supine. With a flat palpation, the needle is fixed between the index and middle fingers of the non-needling hand, and inserted perpendicular to the skin toward the zygomatic bone (Figure 3-8).



Fig 3-8. Needling Technique for Zygomatic Muscle

Precautions: None.

2. MEDIAL PTERYGOID MUSCLE

Referred pain: It is projected to the eyebrow, maxilla, mandible anteriorly, and to the upper and lower molar teeth (superficial layer), and deep into the ear and to the region of the temporomandibular joint also to the lateral neck (deep layer).

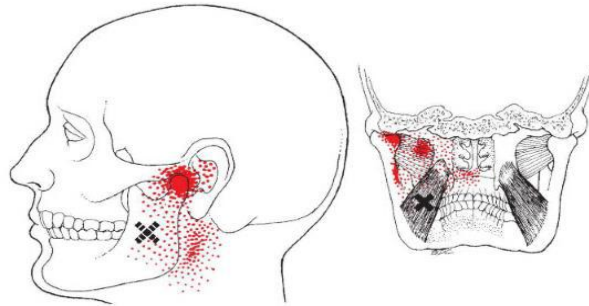


Fig 3-9. Referred pain for Medial Pterygoid Muscle

Indications: Throat pain, TMJ syndrome, Lock and painful jaw, Inability to fully open jaw, ENT and Dental pain, lateral neck pain.

Needling technique: The patient is in supine. The muscle can be needled on its superior or inferior part. It is mostly preferred to needle this muscle over the medial surface of the ramus and angle of the mandible (inferior part). With a flat palpation, the needle is fixed between the index and middle fingers of the non-needling hand and hence inserted through the skin at a shallow angle toward the medial surface of the ramus and angle of the mandible. It is also possible to needle the muscle with a pincer palpation (Figure 3-10).



Fig 3-10. Needling Technique for Medial Pterygoid Muscle

Precautions: None.

3. LATERAL PTERYGOID MUSCLE

Referred pain: It is projected to the cheek, maxilla and the temporomandibular joint.

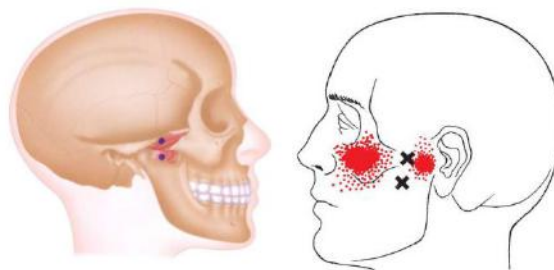


Fig 3-11. Referred pain for Lateral Pterygoid Muscle

Indications: TMJ syndrome, TMJ and Temporal pain, Cranio-mandibular pain, Problems chewing/masticating, Tinnitus and Ear pain, Sinusitis, decreased jaw opening.

Needling technique: The patient is in supine. For the superior division, the needle is inserted perpendicular to the skin through the mandibular fossa, which is located anterior to the temporomandibular joint. The needle is directed upwards and forward deep to the zygomatic arch. For the inferior division, the patient needs to open the mouth and the needle is inserted perpendicular to the skin anterior through the mandibular fossa and directed toward the roots of the upper molar teeth (Figure 3-12).



Fig 3-12. Needling Technique for Lateral Pterygoid Muscle

Precautions: None.

4. MASSETER MUSCLE

The masseter is the most superficial muscle of mastication, easily felt when the jaw is clenched.

Referred pain: The superficial layer refers pain to the eyebrow, the maxilla, the anterior aspect of the mandible, and to the upper or lower molar teeth, Cheek and Jaw pain; whereas the deep layer spreads pain deep into the ear and to the temporomandibular joint area.

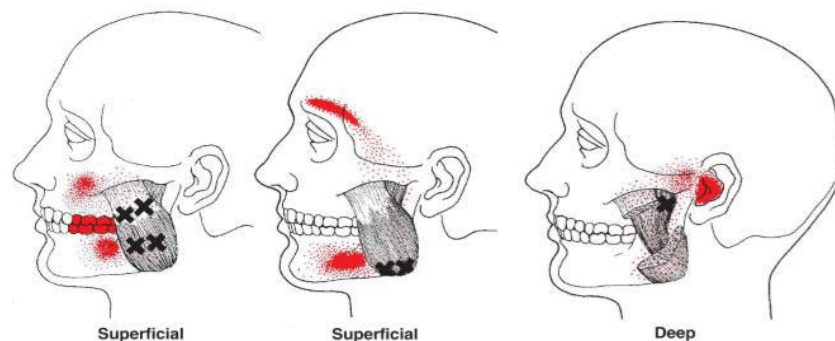


Fig 3-13. Referred pain for Masseter Muscle

Indications: Severely restricted jaw (Trismus), TMJ pain, Tension/stress headache, Ear pain, ipsilateral tinnitus, Dental pain, Cheek and Jaw pain, Pain over eyebrow.

Needling technique: The patient lies in supine. The muscle is generally needled with a flat palpation, although pincer palpation may also be feasible. The needle is inserted perpendicular to the skin toward the muscle belly (Figure 3-14).



Fig 3-14. Needling Technique for Masseter Muscle

Precautions: None.

5. DIGASTRIC MUSCLE

Referred pain: The posterior muscle belly refers pain to the upper part of the sternocleidomastoid muscle and back of the head, whereas the anterior belly projects pain to the four lower incisor teeth, also to throat and front of neck.

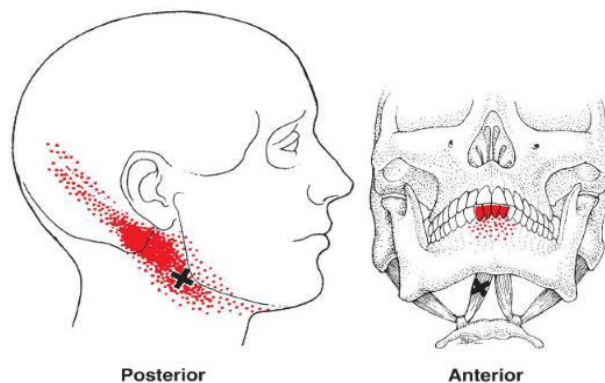


Fig 3-15. Referred pain for Digastric Muscle

Indications: Throat pain, Lateral and front of neck pain, Dental pain (four lower incisors), Back of the Head pain, Jaw pain, Blurred vision and dizziness.

Needling technique: The patient is in supine. For the posterior belly, the needle is inserted perpendicularly to the mastoid notch (mastoid process) towards the transverse process of the atlas. The posterior head can also be needled in the mid-belly using a flat palpation technique. For the anterior belly the head and neck of the patient are slightly extended. The muscle is then needled with a flat palpation technique. The needle is fixed between the index and middle fingers of the non-needling hand, and inserted perpendicular to the skin toward the lower part of the mandible (Figure 3-16).



Fig 3-16. Needling Technique for Digastric Muscle

Precaution: When needling the posterior belly, avoid the external jugular vein

Headache Muscle on Temporal Region

- TEMPORALIS MUSCLE

Referred pain: It is perceived deep in the temporo-parietal region, over eyebrow and inside the head causing temporal headache, maxillary toothache, Ear and TMJ pain.

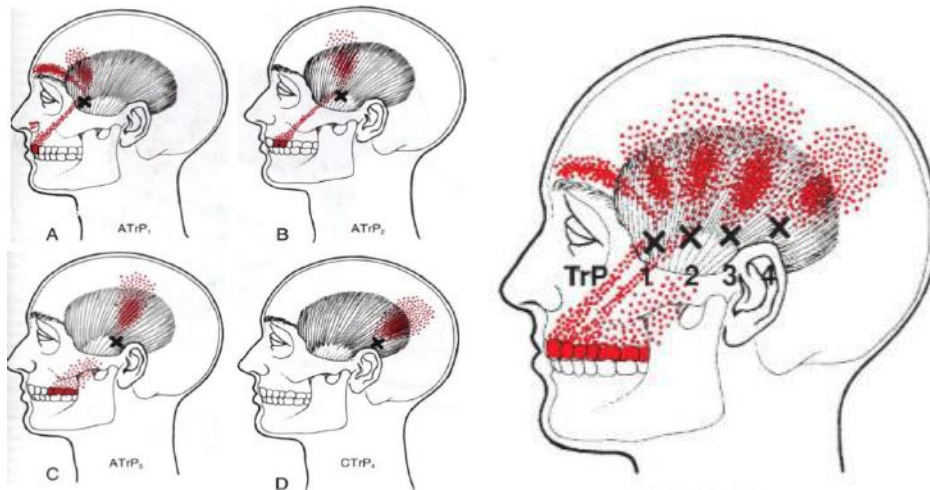


Fig 3-17. Referred pain for Temporalis Muscle

Indications: Headache, Toothache, TMJ syndrome, Hypersensitivity of teeth, Eyebrow, Ear and TMJ pain.

Needling technique: The patient is in supine. The muscle is needled with a flat palpation. The needle is fixed with the index and middle fingers of the non-needling hand and then inserted perpendicular to the skin toward the temporalis fossa (Figure 3-18).



Fig 3-18. Needling Technique for Temporalis Muscle

Precautions: The superficial temporal artery should be identified and avoided.

Headache Muscle on the Head

(Frontal / Parietal / Occipital Region)

- EPICRANIUS (OCCIPITOFRONTALIS)

This muscle is effectively two muscles (occipitalis and frontalis), united by an aponeurosis called the galea aponeurotica, so named because it forms what resembles a helmet upon the skull.

Referred pain patterns: Occipitalis- pain in the lateral and anterior scalp; diffuse into back of head and into orbit. **Frontalis-** localized pain with some referral upwards and over forehead on the same side.

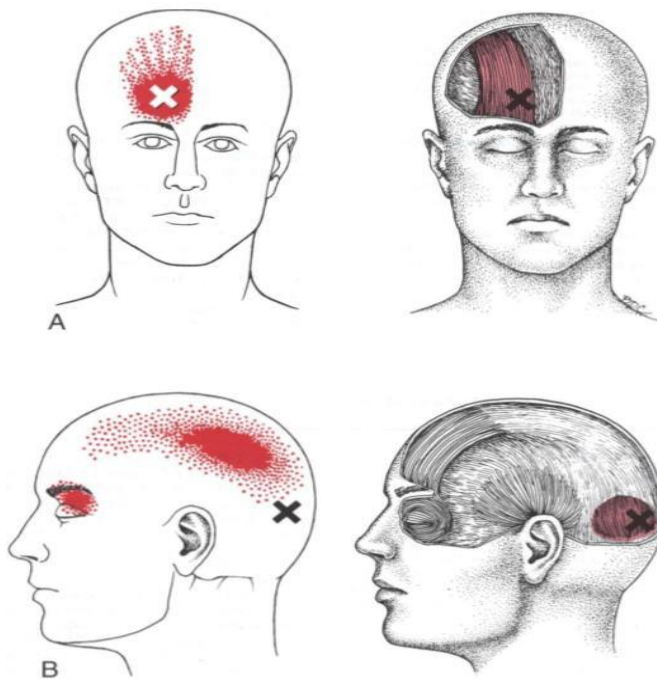


Fig 3-19. Referred pain for Epicranium muscle

Indications: Frontal Headache, Pain in the back of head, Earache, Pain behind the eyes, eyebrows, and eyelids, blurred vision.

Needling Technique

- **Occipitalis Portion:** The patient is in prone. With a flat palpation, the needle is inserted through the skin at a shallow angle while the muscle is fixed between the index and the middle finger of the non-needling hand. Then the needle is conducted perpendicular, in a cephalad direction toward the trigger point of the Occipitalis portion of Epicranius Muscle (The author's technique). (Figure 3-20)



Fig 3-20. Needling Technique for Occipitalis Portion of Epicranius (The model is the author's client)

- **Frontalis Portion:** The patient is in supine. With a flat palpation, the needle is inserted through the skin at a shallow angle while the muscle is fixed between the index and the middle finger of the non-needling hand. Then the needle is conducted perpendicular, in a cephalad direction toward the trigger point of the Frontalis portion of Epicranius Muscle (The author's technique). (Figure 3-21)



Fig 3-21. Needling Technique for Frontalis Portion of Epicranius (The model is the author's client)

Headache Muscle on Lateral and Anterior side of the Neck

- STERNOCLEIDOMASTOID MUSCLE

This muscle is a long strap muscle with two heads. It is sometimes injured at birth, and may be partly replaced by fibrous tissue that contracts to produce a torticollis (wry neck).

Referred pain: The sternal division may refer pain to the vertex, to the occiput, across the cheek, over the eye, to the throat, and to the sternum, whereas the clavicular division refers pain to the forehead and deep into the ear, inducing frontal headache and earache.

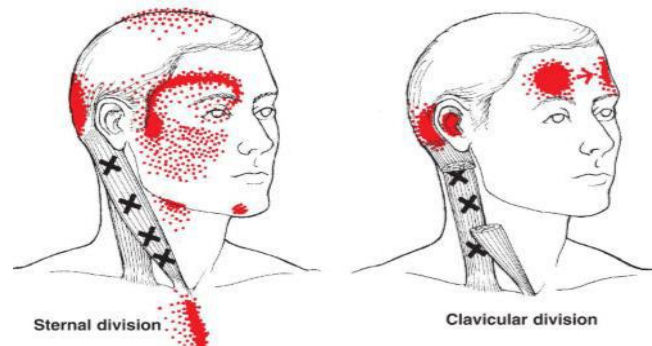


Fig 3-22. Referred pain for Sternocleidomastoid Muscle

Indications: Temporal and frontal headache, Stiff neck, Lateral and front of neck pain, TMJ and throat pain, Pain in the back of head, Eye, Cheek and Ear pain, atypical facial neuralgia.

Needling technique: The patient is in supine. Both heads, clavicular and sternal, are needled by pincer palpation after identifying the carotid artery. The needle is then inserted perpendicular to the skin and directed towards the practitioner's finger. The needle can be inserted from anterior to posterior or from posterior to anterior (Figure 3-23).



Fig 3-23. Needling Technique for Sternocleidomastoid Muscle

Precautions: The carotid artery lies medial to the sternocleidomastoid muscle, next to the trachea. Lift the sternocleidomastoid away from the carotid artery and needle between the fingers holding the muscle in a pincer grasp, directing the needle as described above, to avoid needling the carotid artery.

Headache Muscles covering the Back of the Neck

1. LEVATOR SCAPULAE MUSCLE

Referred pain: It is projected to the angle of the neck and along vertebral border of the scapula.

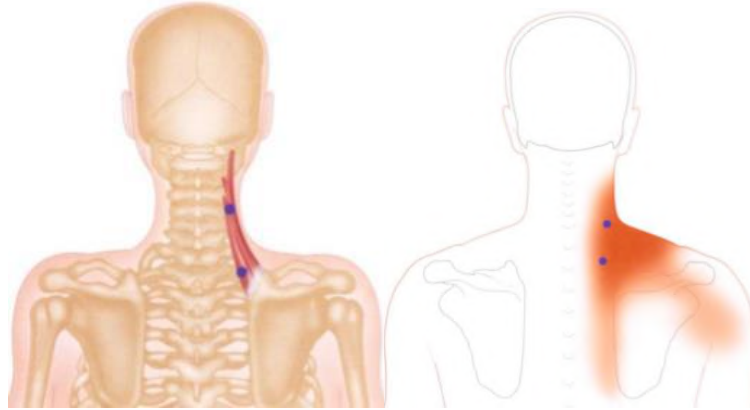


Fig 3-24. Referred pain for Levator Scapulae Muscle

Indications: Back and Lateral of Neck pain, Scapular region pain

Needling technique: The patient is in lateral decubitus position. The muscle is needled via a pincer palpation. For the superior (cervical) portion, the muscle is felt as a ropy muscle band of about 5mm diameter in lateral extent, between the anterior (ventral) border of the upper trapezius and the transverse process of C1. The needle is inserted perpendicular to the skin and directed towards the practitioner's finger. For the lower (shoulder) portion, the muscle is identified over the superior medial border of scapula. The needle is inserted through the skin at a shallow angle, directed toward the upper, medial border of the scapula (Figure 3-25).



Fig 3-25. Needling Technique for Levator Scapulae Muscle

Precautions: Do not needle towards the rib cage to avoid creating a pneumothorax.

2. SPLENIUS CAPITIS MUSCLE

Referred pain: It is projected to the vertex of the head.

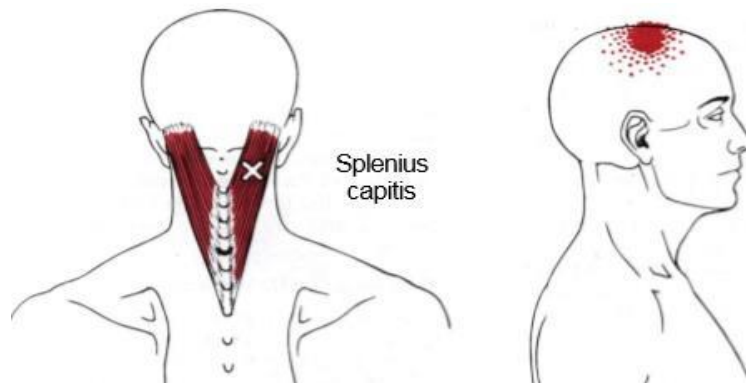


Fig 3-26. Referred pain for Splenius Capitis Muscle

Indications: Vertex Headaches

Needling technique: The patient is in lateral decubitus. One finger is placed on the taut band. The needle is inserted through the skin at a shallow angle in a caudal-medial direction and directed toward the practitioner's finger (Figure 3-27).



Fig 3-27. Needling Technique for Splenius Capitis Muscle

Precautions: When needling above C2, the needle must be directed towards the mastoid process. All needling must be performed posterior to the transverse processes in a caudal-medial direction.

3. SPLENIUS CERVICIS MUSCLE

Referred pain: It refers upwards to the occiput, diffusely through the cranium, and to the back of the orbit. Sometimes, it is projected to the angle of the neck.

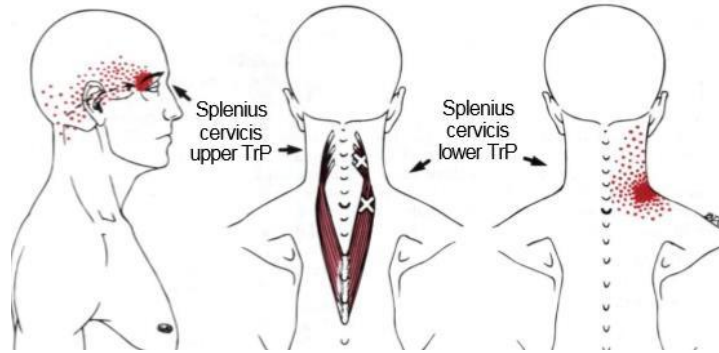


Fig 3-28. Referred pain for Splenius Cervicis Muscle

Indications: Occipital and Temporal Headaches, Eye Pain, Back of Neck Pain, Ear and TMJ pain

Needling technique: The patient is in lateral decubitus. The muscle is needled via a pincer palpation. The needle is inserted perpendicular to the skin from a posterior to anterior direction directed towards the practitioner's finger at a shallow angle (Figure 3-29).



Fig 3-29. Needling Technique for Splenius Cervicis Muscle

4. SEMISPINALIS CAPITIS AND CERVICIS MUSCLES

Referred pain: Both refer pain over the posterior occiput and above the orbit.

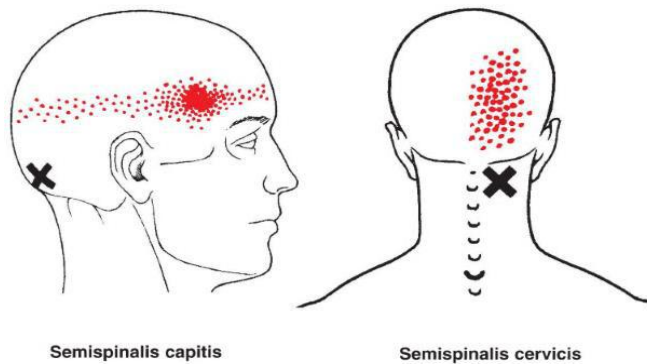


Fig 3-30. Referred pain for Semispinalis Capitis and Cervicis Muscles

Indications: Frontal and Temporal pain, Pain in the back of the head, Eye and Eyebrow pain

Needling technique: The patient is in lateral decubitus. The muscle is needled via a pincer palpation. The needle is inserted perpendicular to the skin from anterior to posterior direction directed towards the practitioner's finger or at a shallow angle, towards the posterior processes of cervical vertebrae or slightly laterally (Figure 3-31).



Fig 3-31. Needling Technique for Semispinalis Capitis and Cervicis Muscles

Precautions: The caudal or slightly lateral direction of the needle ensures that the vertebral artery will not be penetrated and that the needle will not penetrate the cervical spine.

5. SUB-OCCIPITAL MUSCLES

Referred pain: It is perceived as deep pain spreading from the occiput toward the region of the orbit, mimicking bilateral tension type headache.

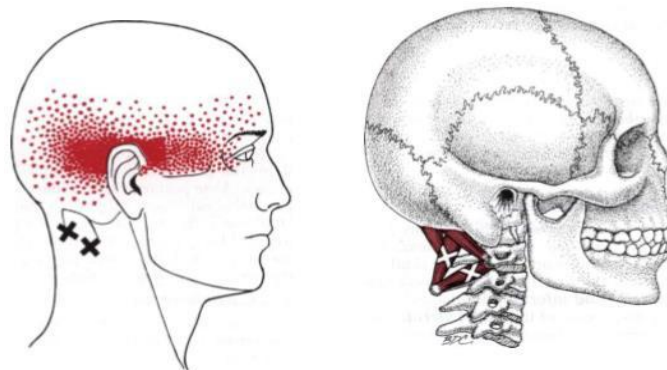


Fig 3-32. Referred pain for Sub-Occipital Muscles

Indications: Occipital and Temporal pain, Eye pain

Needling technique: *Only the oblique capitis inferior muscle is safely needled because of the proximity of the vertebral artery above the arch of the atlas.* The patient is in prone or side-lying. The muscle is needled in a point midway between the transverse process of C1 and the spinous process of C2. The needle is inserted perpendicular to the skin directly in the medial half of the muscle toward the patient's opposite eye in a slightly cranial-medial direction (Figure 3-33).



Fig 3-33. Needling Technique for Sub-Occipital Muscles

Precautions: Avoid directing the needle strictly cranially or too laterally to prevent inadvertent penetration of the vertebral artery or foramen magnum.

6. CERVICAL MULTIFIDI MUSCLES

Referred pain: It spreads upward to the sub-occipital region, and downward over the neck and upper part of the shoulder. Pain is perceived deep into the cervical zygapophyseal joint.

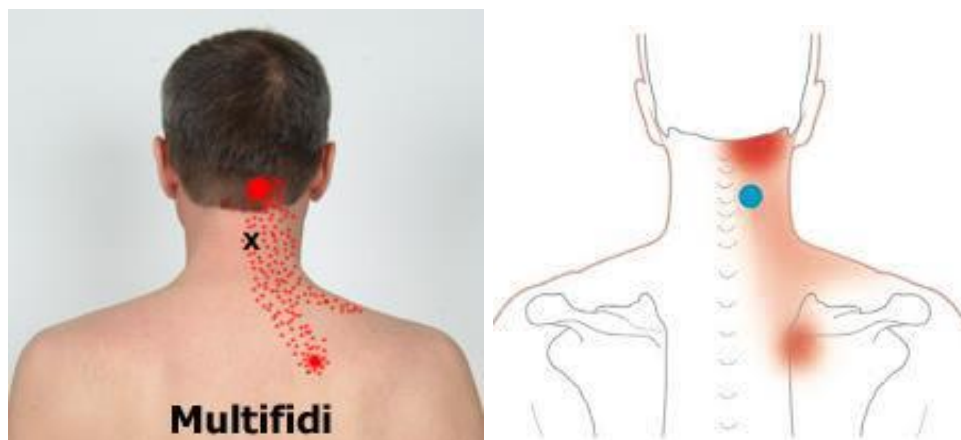


Fig 3-34. Referred pain for Cervical Multifidi Muscles

Indications: Headaches of Sub-occipital region, Back of Neck and upper scapular muscles pain.

Needling technique: The patient is in prone. Cervical multifidi muscles are not directly palpable; but clinicians can suspect the presence of relevant TrPs when patients report deep pain into the cervical joints. The needle is inserted perpendicular to the skin and parallel to the posterior spinous processes, about 1cm lateral to the spinous process or in a medial-caudal direction toward the lamina of the vertebra (Figure 3-35).



Fig 3-35. Needling Technique for Cervical Multifidi Muscles

Precautions: Avoid needling strictly medially to minimize the risk of penetrating the structures within the spinal canal (epidural or subarachnoid space, spinal cord).

Headache Muscles on the shoulder and Scapular region

1. TRAPEZIUS MUSCLE: UPPER PORTION

Referred pain: It spreads ipsilaterally from the posterior-lateral region of the neck, behind the ear, and to the temporal region.

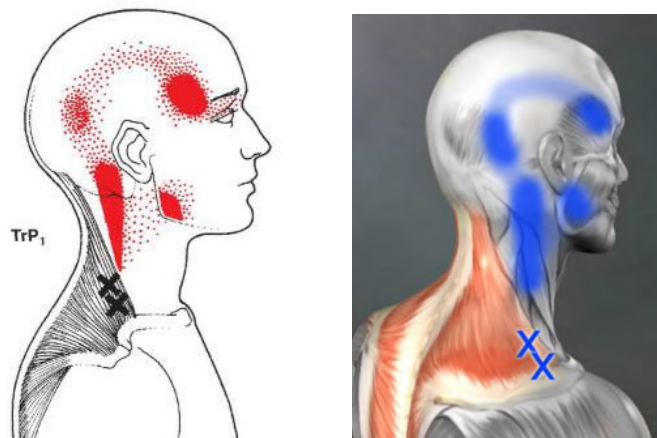


Fig 3-36. Referred pain for Trapezius Muscle: Upper Portion

Indications: Chronic tension and neck ache, stress headache, cervical spine pain

Needling technique: The patient is in prone or side-lying. The muscle is needled with a pincer palpation. The needle is inserted perpendicular to the skin and directed towards the practitioner's finger. The needle is kept between the fingers in the shoulder. The needle can be inserted from anterior to posterior or posterior to anterior (Figure 3-37).



Fig 3-37. Needling Technique for Trapezius Muscle: Upper Portion

Precautions: The most common serious adverse event is penetrating the lung, and producing a pneumothorax. This is minimized by needling strictly between the fingers holding the muscle in a pincer grasp, and needling directed towards the practitioner's finger.

2. LOWER TRAPEZIUS MUSCLE

Referred pain: TrPs may refer to the posterior neck and adjacent mastoid region, to the acromion, and to the suprascapular and interscapular regions.

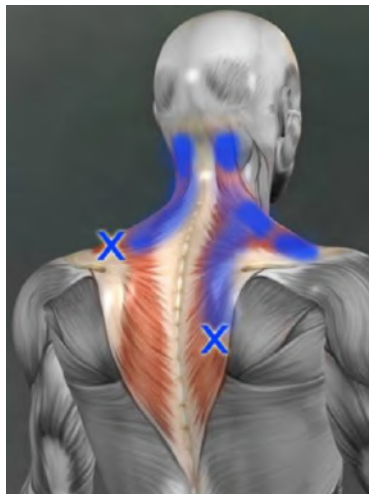


Fig 3-38. Referred pain for Trapezius Muscle: Lower Portion

Indications: Pain in mastoid and sub-occipital region, posterior neck pain

Needling technique: The patient is positioned in prone or on the uninvolved side. Secure the taut band over a rib, between the index and middle fingers, which are placed in the intercostal spaces above and below. Insert the needle perpendicular to the skin then angle it tangentially toward the rib (Figure 3-39).



Fig 3-39. Needling Technique for Trapezius Muscle: Lower Portion

Precautions: Avoid penetration of the lung.

In this section, we learned Dry Needling techniques for the muscles causing headaches. We noticed that the trigger points in the muscles of the head, the neck and the face can cause pain on the locations of the trigger points and refer pain to the adjacent regions. This forms the foundation of the myofascial trigger point therapy on the basis of modern anatomic sciences. Whereas, the Traditional Chinese Medicine has a totally different approach to the treatment of the headaches by needling in Acupuncture points along the Meridians or Channels of vital energy. Further, we discuss the principles and the techniques of Auricular Acupuncture for the treatment of headaches.

AURICULOTHERAPY (EAR ACUPUNCTURE)

FOR HEADACHES

Auriculotherapy is a healthcare modality whereby the external surface of the ear, or auricle, is stimulated to alleviate pathological conditions in other parts of the body. The discovery of this therapy is partially based on the ancient Chinese practice of body acupuncture, yet it is also derived from the discoveries demonstrating that specific areas of the external ear were associated with pathology in specific parts of the body. In chapter 2, an introduction to auriculotherapy, indications and precautions in addition to basic theories of auricular acupuncture and the anatomical regions of auricular surface, also the somatotopic correspondences to specific auricular regions was studied. In this section, we study the Nogier Theory of Auriculotherapy, Projection Zones for Ear Acupuncture, Topography and Indications of Auricular Acupuncture Points According to Regions, and the Treatment of Headaches and Migraines by Auricular Acupuncture.

Nogier Theory of Auriculotherapy

Ear acupuncture has its roots in traditional Chinese medicine and was systematized in modern times by the French neurologist, Paul Nogier, who developed the modern understanding based on the ear's anatomy and physiology. He discovered the somatotopic properties of the external ear and published the world's first embryological ear map in 1957. Based on the influence of Nogier's embryological theory, extensive research and studies were initiated by China's health organizations and practitioners. The Chinese government then authorized a committee to standardize the names and locations of auricular points. Many years of academic exchange between China and Europe produced the two most popular ear maps in the world. Ear acupuncture is thus based on traditional Chinese medicine but also combines anatomy and physiology of modern medicine.

The Projection of the Skeleton according to Nogier

In the Figure 3-40, the projection of the whole skeleton is illustrated. This map is very useful to select proper Acu-points for Ear Acupuncture.

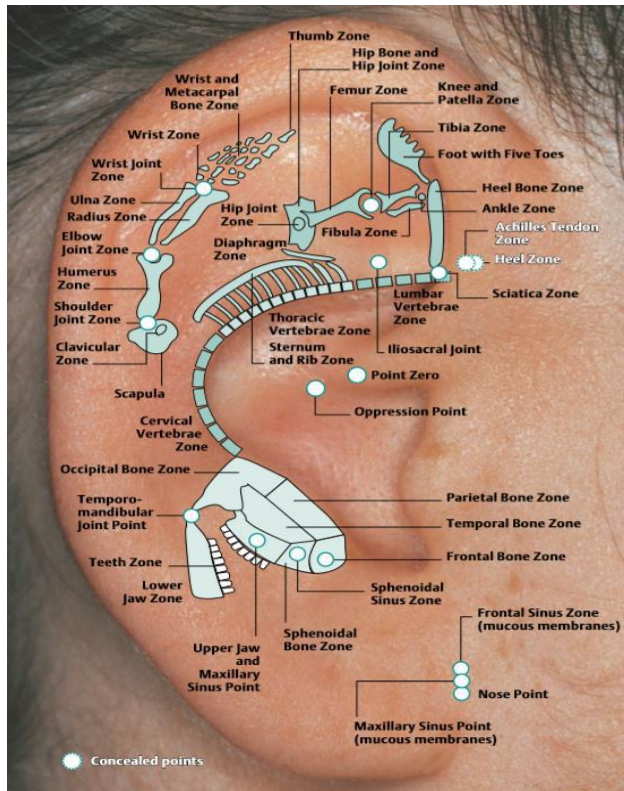


Fig 3-40. the Projection of the Skeleton according to Nogier

The Projection Zones of the Nervous System according to Nogier

In the Figure 3-41, the projection of the nervous system is illustrated. This map is very useful to select proper Acu-points for Ear Acupuncture. The zones for the nervous system are as follows:

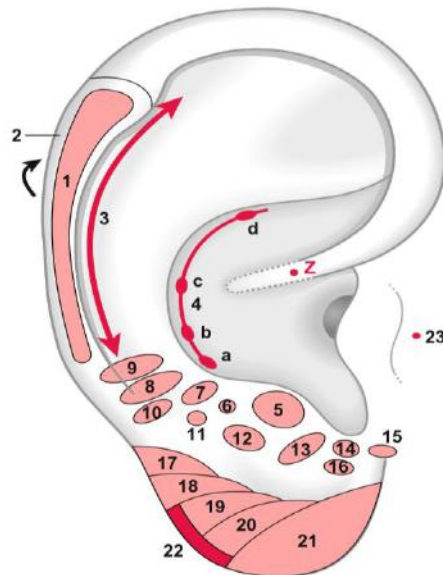


Figure 3-41. The projection zones of the nervous system

- Spinal Cord (Sensory roots on the lateral surface) (Zone 1)
- Spinal Cord (Motor roots on the lateral surface) (Zone 2)
- Intermediolateral nuclei of the lateral horn (Zone 3)
- Sympathetic lateral-vertebral ganglia (Zone 4)
 - a) Cervical Superior Ganglion
 - b) Cervical Middle Ganglion
 - c) Cervical Inferior Ganglion
 - d) Thoracic Ganglia
- Thalamus (Zone 5)
- Cerebellum (Zone 7)
- Medulla oblongata (Zone 9)
- Pons (Zone 10)
- Hypothalamus (Zone 12)
- Striatum (Zone 13)
- Cingular circonvolution (Zone 15)
- Hippocampus (Zone 16)
- Parietal cortex (Zone 18)
- Frontal cortex (Zone 20)
- Prefrontal cortex (Zone 21)
- Corpus callosum (so called Tragus Master-point) (Zone 23)
- Red nucleus (Zone 6)
- Reticular formation (Zone 8)
- Locus niger (Zone 11)
- Amigdala (Zone 14)
- Occipital cortex (Zone 17)
- Temporal cortex (Zone 19)
- Trigeminal nerve (Zone 22)

Projection Zones for Ear Acupuncture according to Nogier

In the Figure 3-42, the Topography of important projection zones on ear is illustrated. This map is very useful to select proper Acu-points for Ear Acupuncture.

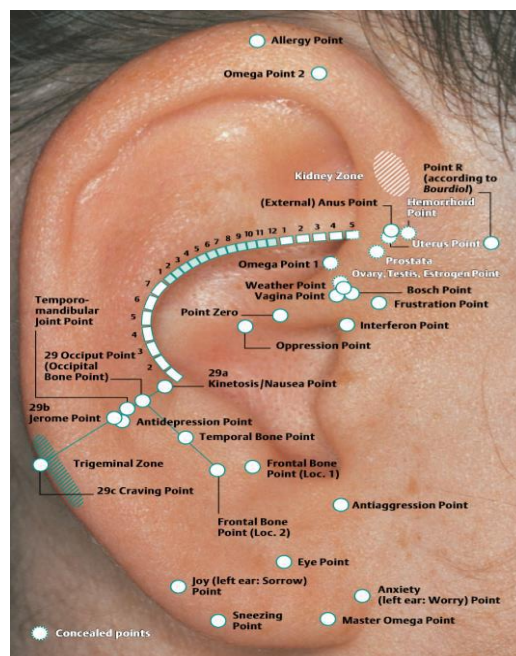


Fig 3-42. Topography of important projection zones on ear

Projection Zones on the Rear Side of the Auricula

According to Nogier, the motor elements are projected on the back of the auricula and the sensory elements on the front of the auricular. Thus, the motor zone of an organ on the back of the ear is located exactly opposite to the sensory zone of that organ on the front of the ear. **Accordingly, to completely cover an organ the sensory zone on the front of the ear and the motor zone on the back of the ear would have to be needed.**

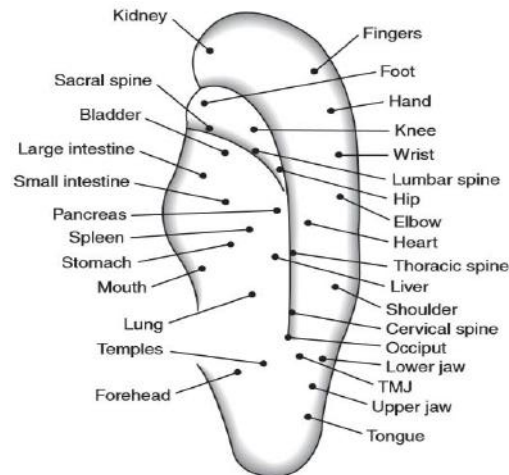


Fig 3-43. Projection of the skeleton and Zang-Fu organs on the posterior surface of the ear.

The Projection of the Spinal Column in the Region of the Auricula According to Nogier

According to Nogier, the spinal column is projected on the anti-helical rim and the inferior anti-helical crus. There are seven cervical (C1 to C7), twelve thoracic (T1 to T12) and five lumbar (L1 to L5) vertebral segments recognized in this area. (Fig 3-44)

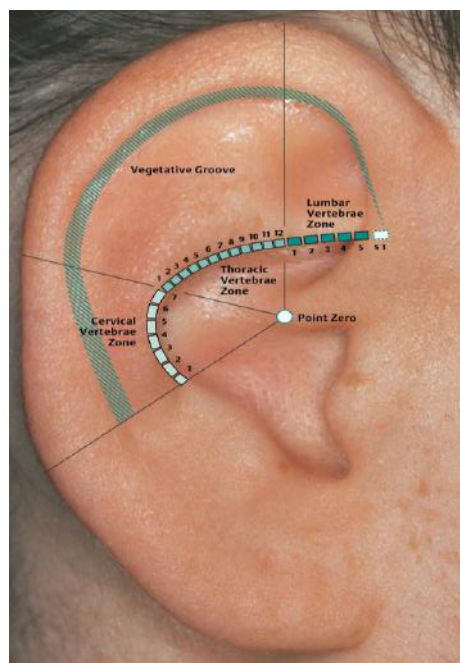


Fig 3-44. The projection of the Spinal Column

Topography and Indications of Auricular Acupuncture Points According to Regions

Points on the Lobule According to Nogier

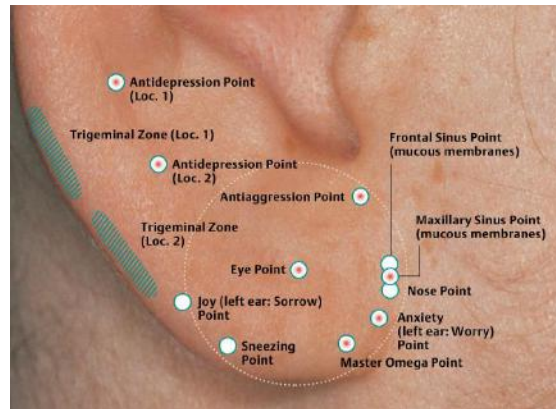


Fig 3-45. Points on the Lobule According to Nogier

Trigeminal Zone, Eye Point (*Master Sensorial Point*), Sneezing Point, Anti-aggression Point, Master Omega Point (*Cerebral Point*), Anti-depression Point, Anxiety (Right Ear) / Worry (Left Ear) Point, Nose Point, Points of Sorrow/Left and Joy/Right, Maxillary Sinus Point and Frontal Sinus Point are the zones and points with different helpful indications on the lobule.

Master Omega Point (*Cerebral Point*) represents the prefrontal lobe of the brain. It can treat Psychological disorders such as nervousness, anxiety, stress, fear, worry, angst, dream-disturbed sleep, poor memory, obsessive compulsive state, pessimistic thinking, psychosomatic disorders, and general analgesia.

Except for the above mentioned Auricular points offered by Nogier, the points **Occipital Cortex** (*Occipital Lobe, Visual Cortex / Zone 17* in Fig 3-46), **Parietal Cortex** (*Parietal Lobe, Somatic Cortex / Zone 18* in Fig 3-46), **Temporal Cortex** (*Temporal Lobe, Auditory Cortex, Acoustic Line / Zone 19* in Fig 3-46), **Frontal Cortex** (*Frontal Lobe, Pyramidal System / Zone 20* in Fig 3-46), **Prefrontal Cortex** (*Executive Brain, Master Cerebral Point / Zone 21* in Fig 3-46) and **Pons** (Zone 10 in Fig 3-46) can also be found on the Lobule area.

*Note: The zones from 17 to 21 in Fig 3-46 constitute the **Cerebral Cortex** representing on the ear.*

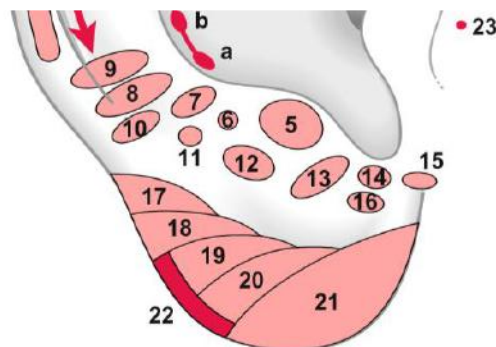


Fig 3-46. The somatotopic representation of the nervous system on the lobule according to Nogier

There are also Lips, Teeth, and the Tongue on the lobule area. (Fig 3-47)

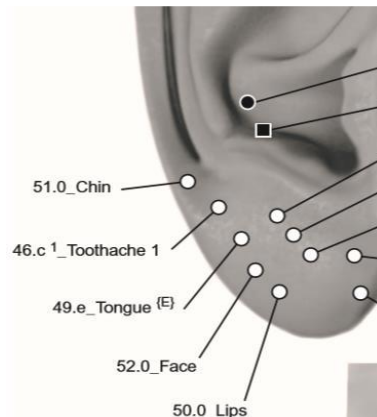


Fig 3-47. Points for the lips, teeth, tongue, and other points on the lobule

Points on the Tragus and Supra-Tragic Notch According to Nogier

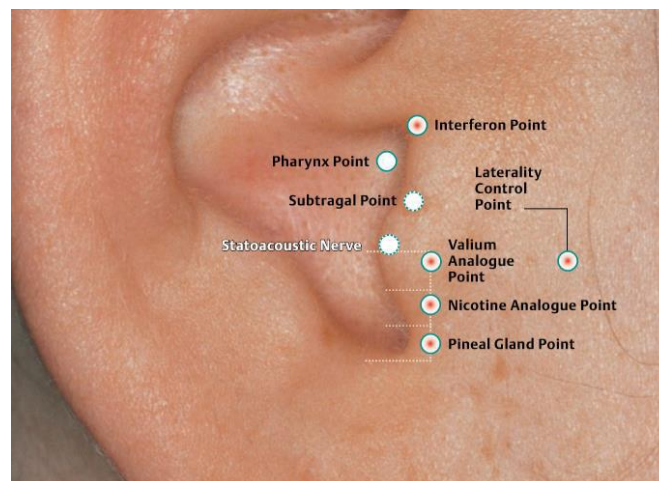


Fig 3-48. Points on the Tragus and Supra-Tragic Notch according to Nogier

Larynx / Pharynx Point, Interferon Point, Valium Analogue Point (*Tranquilizer Point*), Nicotine Analogue Point, Pineal Gland Point, Sub-tragal Point, Laterality Control Point (*Master Oscillation Point*) and stato-acoustic nerve are the points with different practical indications on the Tragus and Supra-Tragic Notch.

Interferon Point is used to enhance immune defense, reduce fever, and produce anti-inflammatory responses.

Valium Analogue Point (*Tranquilizer Point*) and **Nicotine Analogue Point** are calming points that reduce craving in persons withdrawing from smoking or drugs.

Laterality Control Point (*Master Oscillation Point*) balances laterality disorders related to dysfunctional interactions between the left and the right cerebral hemispheres.

Points on the Inter-Tragic Notch According to Nogier

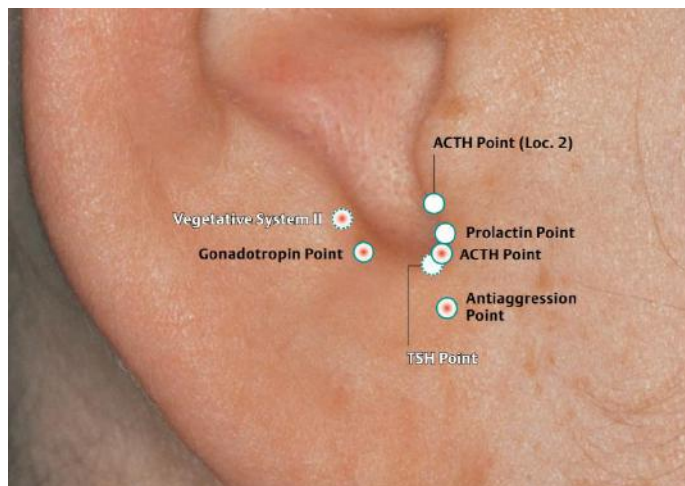


Fig 3-49. Points on the Inter-Tragic Notch According to Nogier

Anti-aggression Point, TSH²³ Point, Prolactin Point, Gonadotropin Point (*Ovary Point According to Chinese Nomenclature*), ACTH²⁴ Point and Vegetative Point II (Aa analgesic point) on the Inter-Tragic Notch. In addition, Master Endocrine Point (*Internal Secretion, Pituitary Gland*) is a master point controlling all other endocrine glands. (Point 22 in Fig 3-50)

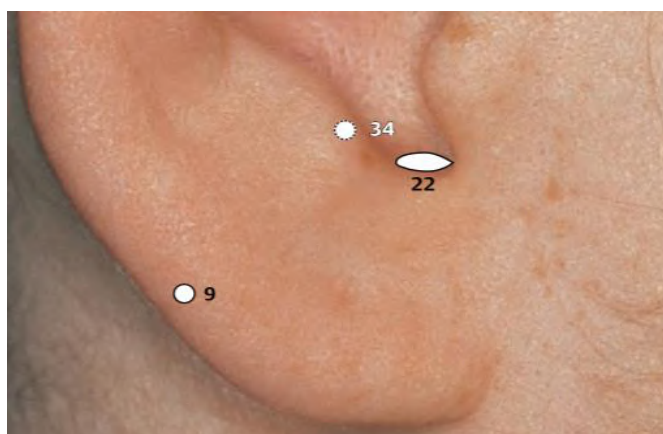


Fig 3-50. Endocrine zone in the inter-tragic notch (point 22)

²³ - Thyroid-Stimulating Hormone

²⁴ - Adrenocorticotrophin Hormones

Points on the Antitragus According to Nogier

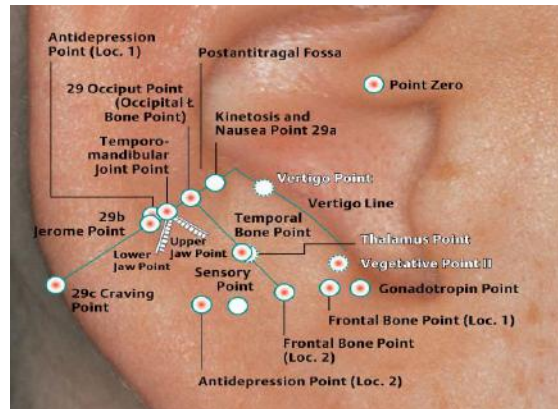


Fig 3-51. Points on the Antitragus According to Nogier

Main points on Antitragus: Frontal Bone Point, Temporal Bone Point, Occipital Bone Point, Kinetosis and Nausea Point, Jerome Point / Relaxation Point, Craving Point, Vertigo Point, Temporomandibular Joint Point, Upper Jaw Point, Lower Jaw Point, Sensory Point, Vegetative point II, Gonadotropin Point (*Ovary Point According to Chinese Nomenclature*), Anti-depression Point, Thalamus Point and Sub-cortex (*Also known as Brain zone*).

Thalamus Point represents the thalamus and the hypothalamus. It is the highest neurological level of the gate control system for pain.

Sensory Line- Nogier calls the line between the Frontal Bone Point, Temporal Bone Point, and Occipital Bone Point the Sensory Line.

Projection Zones of the Cranial Bones and Sinuses According to Nogier

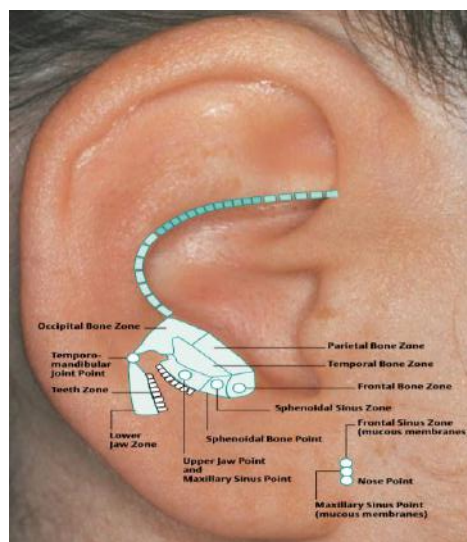


Fig 3-52. Projection Zones of the Cranial Bones and Sinuses According to Nogier

The cranial bones are projected on the area of the antitragus. (Fig 3-52)

Projection Zones of the Spinal Column According to Nogier

You can see the projection zones of the spinal cord in the Fig 3-53 that is lied on the inferior crus and the stem of antihelix. The spinal cord region on the ear consists of Cervical (C1 to C7), Thoracic (T1 to T12) and Lumbar segments (L1 to L5).

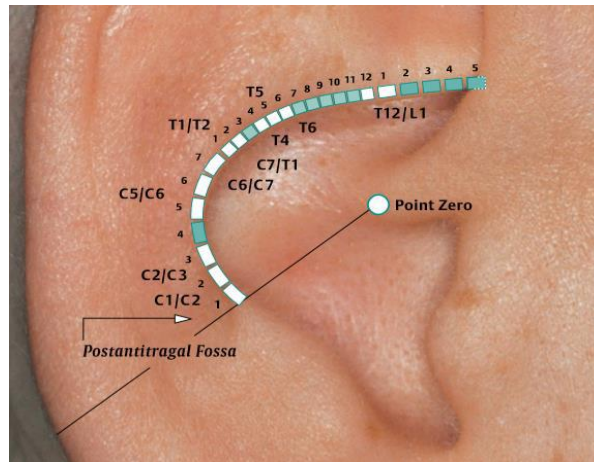


Fig 3-53. Projection Zones of the Spinal Column According to Nogier

Projection Zones of the Lower Extremity According to Nogier

In the following, you can see the Projection Zones of the Lower Extremity, lied on Triangular Fossa according to the system of Nogier. (Fig 3-54)

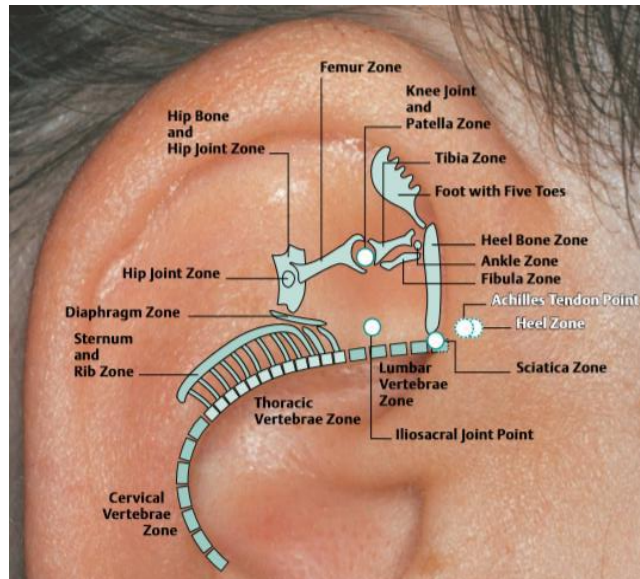


Fig 3-54. Projection Zones of the Lower Extremity according to Nogier

Points in the Region of the Superior and Inferior Anti-helical Crura and in the Triangular Fossa According to Nogier

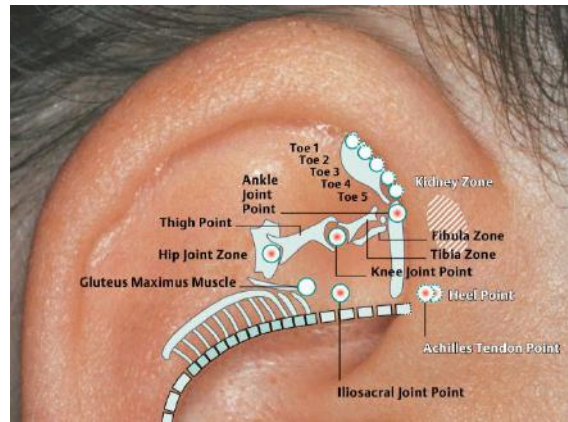


Fig 3-55. Projection of entire lower extremity is projected in the triangular fossa

The entire lower extremity is projected in the triangular fossa. (Fig 3-55)

Main projection points in triangular fossa: Hip Joint, Femur, Knee Joint, Ankle, Ilio-sacral Joint, Gluteal Muscle, Lower Leg (Femur and Fibula), Heel, Toe, and Achilles Tendon Point.

One important point in Triangular Fossa is called 'SHENMEN'.

SHENMEN (*Spirit Gate, Divine Gate*) - The purpose of Shen Men is to tranquilize the mind and to facilitate a state of harmony, serenity, and a deeper connection to one's essential spirit. It is utilized in all treatment plans, including auricular acupuncture analgesia for surgery.

Location: The upper half of the lateral one-third of the triangular fossa.

Points on the Scapha According to Nogier, Projection of the Upper Extremities

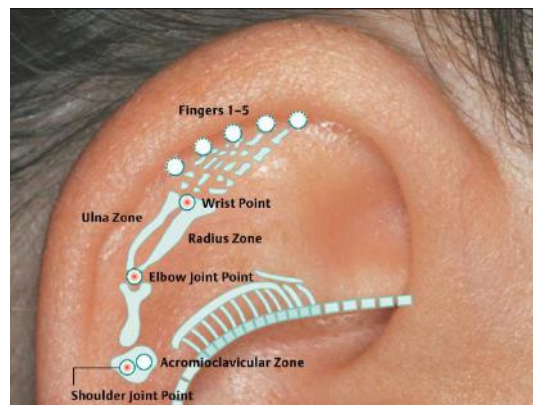


Fig 3-56. Projection of the Upper Extremities According to Nogier

Projection of the Upper Extremities on the Scapha: Finger Points 1 to 5, Wrist, Forearm, Elbow Joint, Upper Arm, Shoulder Joint and Acromioclavicular Joint Point.

Points on the Scapha According to Nogier

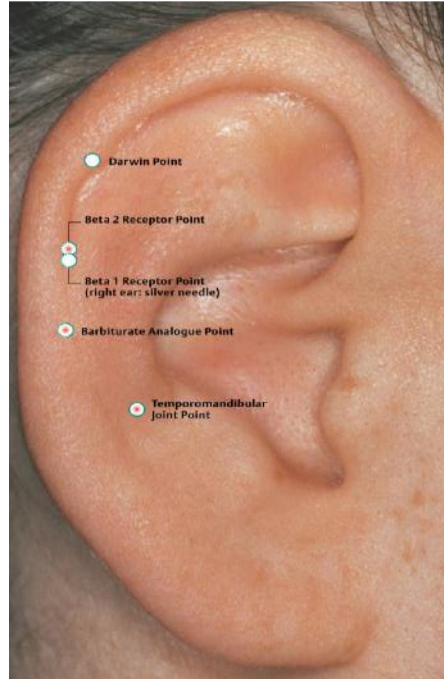


Fig 3-57. Points on the Scapha According to Nogier

Main points on the Scapha: Barbiturate Analogue, Beta 1 Receptor, Beta 2 Receptor, Temporomandibular Joint and Darwin Points

Points in the Region of the Ascending Helix Branch (Crus of Helix) According to Nogier, External

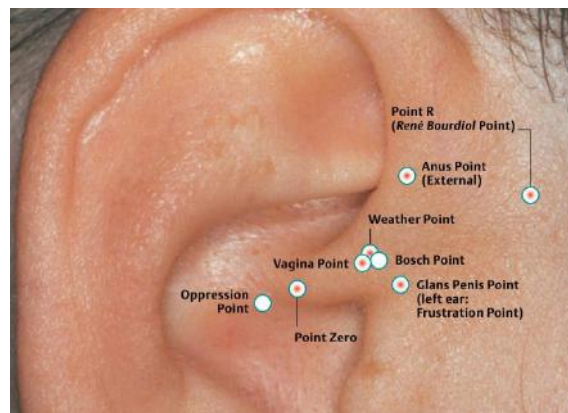


Fig 3-58. Points in the Region of the Crus of Helix according to Nogier, External

The points in the region of the crus of helix are Oppression Point (Anxiety Point 2), Vagina, Bosch Point or Libido Point, Clitoris Point, Glans Penis Point or Frustration Point (Right ear: Glans penis / Left ear: Frustration), Anus Point, Point Zero (*Ear Center, Solar Plexus*), Weather Point and Point R (An adjuvant point in psychotherapy).

Point Zero (*Ear Center, Solar Plexus*) is the geometrical and physiological center of the whole auricle. It brings the whole body toward homeostasis, producing a balance of energy, a balance of hormones, and a balance of brain activity. It supports the actions of other auricular points and returns the body to the idealized state that was originally present in the womb.

Covered Points in the Region of the Ascending Helix Branch (Crus of Helix) According to Nogier



Fig 3-59. Covered Points in the Region of the Crus of Helix according to Nogier

Omega Point 1 (*Hypogastric Plexus Point*), Ovary, Testis, Estrogen Point, Renin / Angiotensin Point, Gestagen Point, Prostate Point, Uterus Point²⁵, Kidney Zone and Hemorrhoid Point (*Internal Anus Point*) are the covered Points in the Region of the Crus of Helix.

There are also Ear Apex²⁶ and Allergy Points (*Allergy Point 1 / Allergy point 2*).

²⁵ - Acupuncture of points influencing hormones in the area of the ascending helix is contraindicated during pregnancy

²⁶ - Unlike other points described as cover points, this point is not concealed

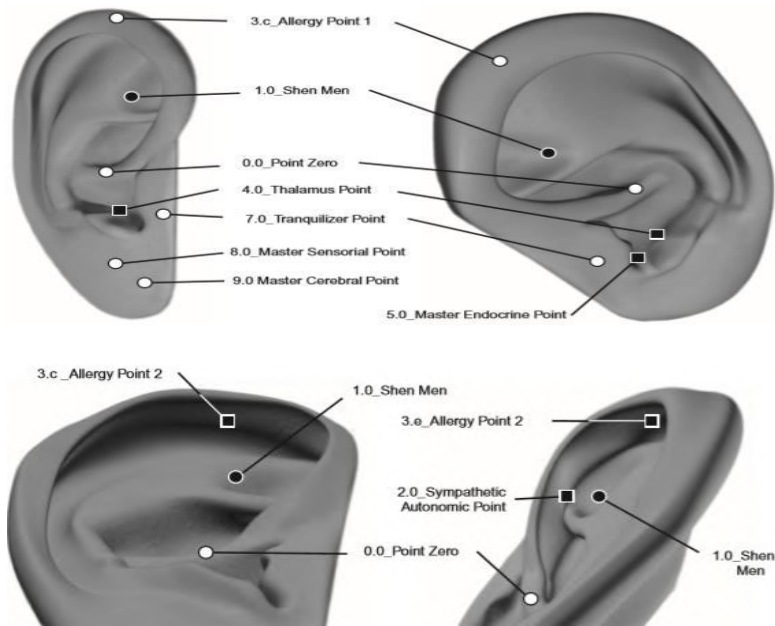


Fig 3-60. Allergy Point 1 & 2 can be found in this Figure

Sympathetic Autonomic Point is another point as well.

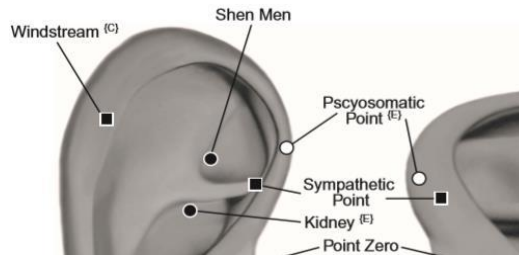


Fig 3-61. Sympathetic Autonomic Points can be found in this Figure

Projection Zones in the Concha (Internal Organs) According to Nogier

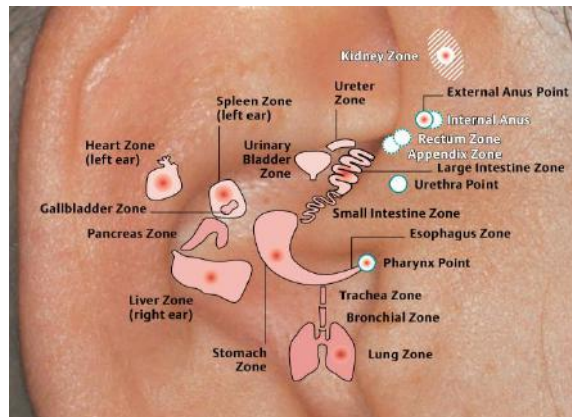


Fig 3-62. Projection Zones in the Concha according to Nogier

Heart Zone, Lung Zone, Bronchial Zone, Trachea Zone, Pharynx Zone, Esophagus Zone, Stomach Zone, Large Intestine Zone, Small Intestines (*Jejunum, Ileum*), Appendix Zone, Rectum Point, Anus Point, Liver Zone, Gallbladder Zone, Pancreas Zone, Spleen Zone, Kidney Zone, Ureter Zone, Urinary Bladder Zone, Urethra Point and Mouth are located in the concha.

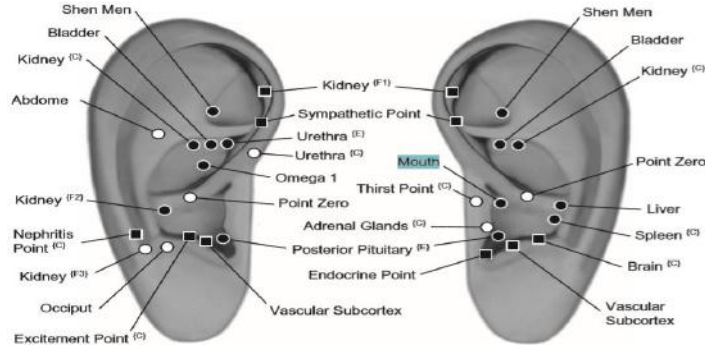


Fig 3-63. Mouth Point at the lower border of the helix crus

There are also Thyroid, Parathyroid, Thymus and Adrenal Glands.

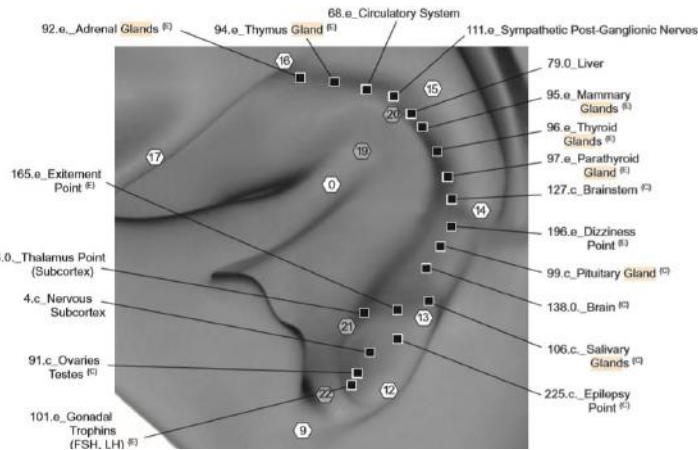


Fig 3-64. Thyroid, Parathyroid, Thymus and Adrenal Gland Points in the Concha region

Plexus Points and Important Points in the Concha According to Nogier

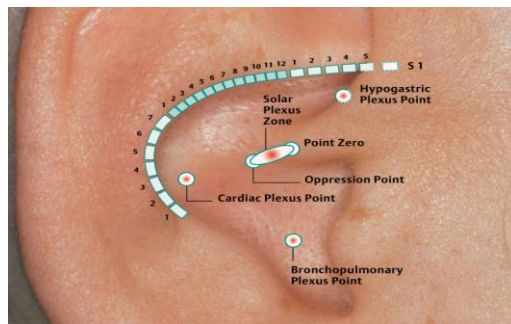


Fig 3-65. Plexus Points and Important Points in the Concha according to Nogier

Plexus Points and Important Points in the Concha: Cardiac Plexus Point, Bronchopulmonary Plexus Point, Solar Plexus Zone and Hypogastric Plexus Point (*Omega Point 1*).

There is also **Oppression Point** (*Anxiety Point 2*) in this area.

Treatment of Headaches and Migraines by Auricular Acupuncture

Auriculotherapy for headaches involves stimulating particular points on the auricles that correspond to different organ systems in the body. In traditional Chinese medicine (TCM), the ears are not just isolated hearing organs; they are closely connected with the internal organs. TCM regards the auricular region as an important body part for clinical diagnosis and treatment, and stimulating the points on the auricular can achieve general or local effects. This is especially effective for treating headaches and migraines. Unlike body acupuncture, which selects points for treatment whose locations have been handed down for centuries and are now consolidated, Ear Acupuncture selects points which have to be detected at every session and may vary from one session to the other in the same therapeutic course. It is particularly noteworthy that this method, when efficient, impacts pain in a very short time (within 60 s from the application of the needle on the point sensitive to pressure) and could therefore be considered a very active non-pharmacological aid in treating acute headache and migraine pain particularly in patients who are inclined to analgesic drug abuse with the consequent risk of developing chronic headache.

Point Selection²⁷ for Headaches within Anatomical Regions of Auricle

➤ Headache Points on the Lobule

Trigeminal Zone- Trigeminal neuralgia, dental pain.

Eye Point (*Master Sensorial Point*) - Eye Pain, blurred vision, migraine.

Master Omega Point (*Cerebral Point*) - A general analgesic point.

Anxiety (Right Ear) / Worry (Left Ear) Point- Neurasthenia (weakness or exhaustion of the nervous system that may result in headaches).

Nose Point- Headaches resulting from sinusitis.

Maxillary Sinus Point- Frontal headaches, sinusitis, Headaches resulting from sinusitis.

Frontal Sinus Point- Frontal headaches, sinusitis, Headaches resulting from sinusitis.

Teeth- Toothaches.

²⁷ - There are multiple indications for the points. In this section, the indications related to headaches are just presented.

▪ **Other Headache Points on the Lobule:**

(1) *Anti-depression Point*, (2) *Anti-aggression Point*, (3) *Points of Sorrow (Left) and Joy (Right)*

➤ **Headache Point on the Tragus and Supra-Tragic Notch**

Valium Analogue Point (*Tranquilizer Point*)-General sedating, Headache from blood pressure

▪ *Another Headache Point on the Tragus: Laterality Control Point (Master Oscillation)*

➤ **Headache Points on the Inter-Tragic Notch**

Vegetative Point II- A general analgesic point.

Gonadotropin Point (*Ovary Point by Chinese Nomenclature*)—Hormonal Headaches

Master Endocrine Point (*Internal Secretion, Pituitary Gland*) – Hormonal Headaches

ACTH²⁸ Point- Hormonal headaches accompanied by eye pain.

➤ **Headache Points on the Antitragus**

Sensory Line- Energetic blood flow to the head and Pain treatment.

Frontal Bone Point- Frontal headaches, Hypertension Headaches, sinusitis, dizziness, impaired vision, neurasthenia.

Temporal Bone Point- Cephalgia, vertigo, conditions of pain, migraine headaches, temporal headaches, and tinnitus.

Occipital Bone Point- Occipital headaches, tension headaches, facial spasms, stiff neck, dizziness, sea or motion sickness, vertigo, impaired vision; An important analgesic point with a broad spectrum of activity.

Upper Jaw Point- Relieves upper jaw tension, toothaches, TMJ pain.

Lower Jaw Point- Relieves lower jaw tension, toothaches, TMJ pain.

Sensory Point- General pain relief.

Vegetative point II- A general analgesic point.

Gonadotropin Point (*Ovary Point by Chinese Nomenclature*) – Hormonal Headaches.

²⁸ - Adrenocorticotrophin Hormones

Thalamus Point- This master point is the highest neurological level of the gate control system for pain. *Indication:* a general analgesic point, acute and chronic pain relief, hypertension headaches, neurasthenia. *Caution:* Contraindicated during pregnancy.

Sub-cortex Point (*Also known as Brain zone*)- Neurasthenia, Insomnia.

- **Another Headache Point on the Antitragus: Jerome Point / Relaxation Point**

➤ **A Headache Point in the Triangular Fossa**

Shen-men (*Spirit Gate, Divine Gate*) – Headaches, General pain relief, Insomnia, Headaches from high blood pressure

➤ **Headache Points in the Region of Anti-Helical Rim**

There are *seven cervical (C1 to C7) Vertebral segments* on the inferior rim of anti-helix (Anti-helix tail) analogous to seven cervical vertebrae. Based on irritated or involved vertebrae, Acupuncture for one or more segments of this region can relieve Neck pain, Stiff neck or Cervicogenic Headaches.

➤ **Headache Points on the Scapha**

Barbiturate Analogue Point- Effects similar to barbiturates; A general tranquilizing and sedating point; insomnia.

Beta 1 Receptor Point- Hypertension Headaches.

Temporomandibular Joint Point- TMJ Pain, Tinnitus.

Shoulder Joint Point- It is especially effective for Stiff Neck, Scapular Muscle Spasm and Cervicogenic Headaches.

➤ **Headache Points in the Region of the Ascending Helix Branch, External**

Point Zero (*Ear Center, Solar Plexus*) - A strong spasmolytic point; Point Zero is frequently combined with the Shen Men point for treatment of most health disorders.

Weather Point- Headaches due to changes in the weather, Migraine; detectable on right ear.

Vagina – Hormonal Headaches

Bosch Point or Libido Point – Hormonal Headaches

Ear Apex- Headaches from hypertension.

➤ ***Covered Headache Points in the Region of the Ascending Helix Branch, Concealed***

Ovary, Testis Point- Hormonal Headaches, Hormone related migraine.

Estrogen Point- Hormonal Headaches.

Gestagen Point- Hormonal Headaches, hormone related migraine.

Renin / Angiotensin Point- Headaches from hypertension or hypotension.

Allergy Points (*Allergy Point 1 / Allergy point 2*)- *Location:* On the internal and external sides of the apex of the ear (two points)- *Indication:* A general analgesic point; Headaches from high blood pressure.

Sympathetic Autonomic Point- Headaches from hypertension or hypotension.

- ***Another Headache Point on the Ascending Helix Region (Concealed):*** *Kidney Zone*

➤ ***Headache Points / Zones in the Concha***

Heart Zone- Neurasthenia, nervousness, insomnia.

Stomach Zone- Headaches, Toothaches, insomnia and stress.

Liver Zone- Hormone-related Headaches, Dizziness, Hypertension Headaches, Eye Pain.

Gallbladder Zone²⁹- Migraines, Tinnitus.

Pancreas Zone- Migraines, Tinnitus.

Urinary Bladder Zone- Occipital pain and Migraines.

Parathyroid Gland- Headaches from muscle cramps or muscle spasms.

Cardiac Plexus Point- Hypertension and Hysterical Headaches. It has a better effect in combination with Heart Zone.

- ***Another Headache Point in the Concha:*** *“Adrenal Gland”*

²⁹ - Gallbladder Point (Gb) is the most important Auricular Point for Headaches and Migraines

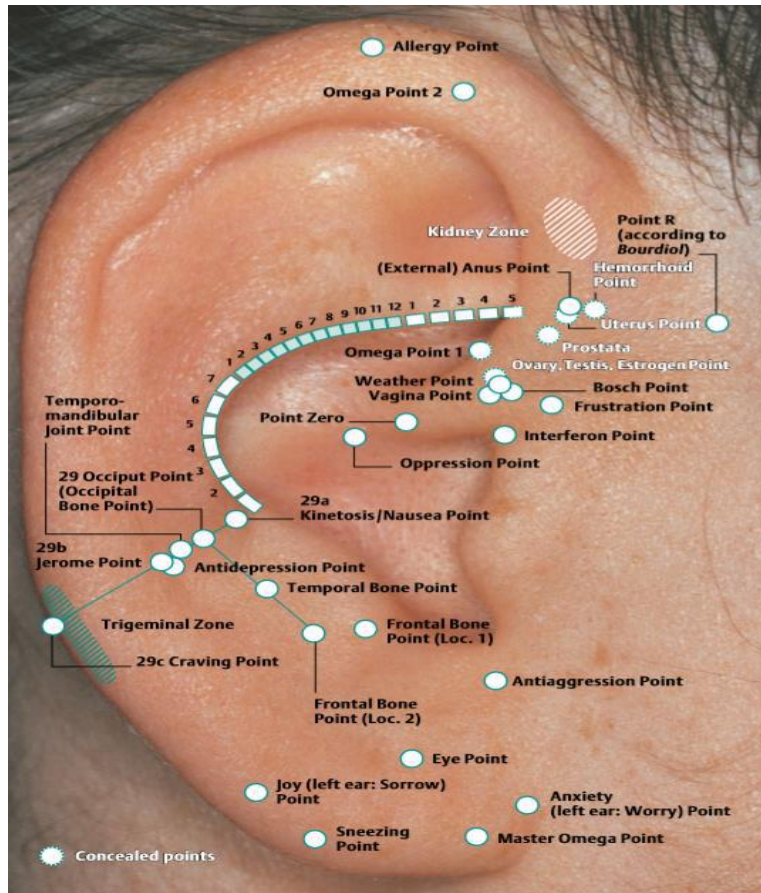


Fig 3-66. Topography of important projection zones on ear

Prescriptions for the treatment of Headaches and Migraines

➤ A general prescription for Headaches:

Heart, Kidney, Zero Point, Shen-men, Insomnia 1, Insomnia 2, Pineal gland, Master Cerebral, Thalamus point, Brain point, Forehead, Occiput.

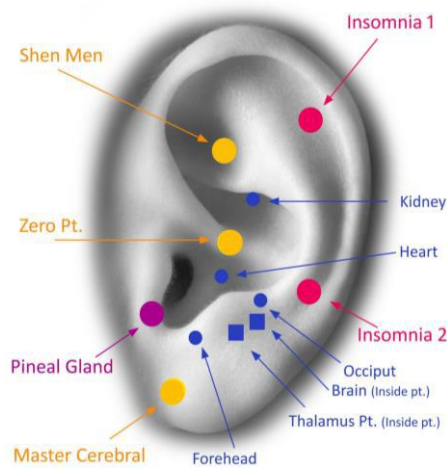


Fig 3-67. A general prescription for Headaches

➤ **The Prescription for Cervicogenic Headaches, Neck Pain and Stiff Neck**

- Cervical Ganglia (Fig 3-68):
 1. Upper Cervical Ganglion
 2. Middle Cervical Ganglion
 3. Lower Cervical Ganglion
- Atlanto-Occipital Joint = C0/C1 (Fig 3-68)
- Cervical segments (C1 to C7) on Anti-helix tail

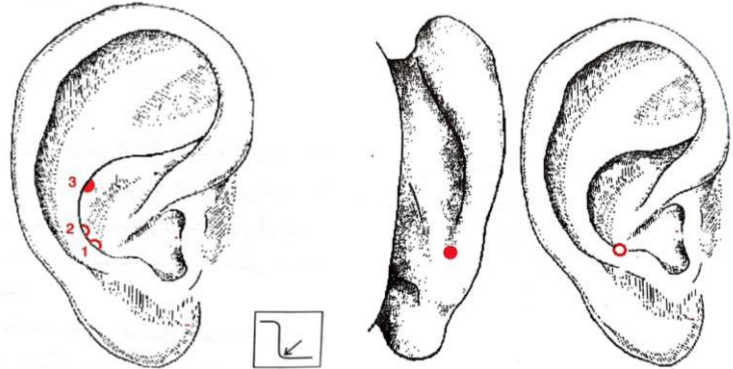


Fig 3-68. Cervical Ganglia (Left Figure) / Atlanto-occipital Joint (Right Figure)

➤ **Prescription within the Gallbladder points on Auricle**

Gallbladder is the most important Auricular Point for Headaches and Migraines. The Acupuncture points of Gallbladder meridian can be detected on each auricle. These points can be needed for Shao-Yang Type Headaches (Pain along the gallbladder channel). (Fig 3-69)

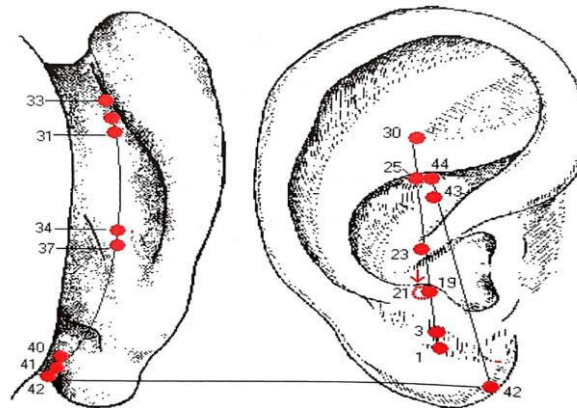


Fig 3-69. Prescription within the Gallbladder points for Shao-Yang Type Headaches (Gb1-Gb43)

Needling Method

Select 3 to 5 points on each auricle. Sterilize the ear and stimulate with needles. Insert a needle into the cartilage and then twirl rapidly for 30 seconds. For persistent headache, use strong stimulation for about 5 minutes.

Be careful not to penetrate through the ear. Retain the needle for 30 minutes to enhance stimulation or to facilitate further manipulation. Do this, every two days, 10 to 20 times as one course, and rest for one week before the next course. If individuals cannot receive treatment on time due to work, intradermal needles are used instead, which can keep 3 to 5 days.

Auricular Acupuncture Points can be stimulated by needling, pressing and bloodletting methods.

In this section, auricular therapy was introduced as a form of alternative medicine based on the idea that the ear is a micro system, which reflects the entire body, represented on the auricle. Except for the discoveries of the ancient Chinese practice Ear Acupuncture is also based on the western classical medicine. We learnt the Somatotopic Correspondences to Specific Auricular Regions, the Projection Zones for Ear Acupuncture and the Indications of Auricular Acupuncture Points According to Regions as well as the Treatment of Headaches and Migraines by Auricular Acupuncture.

In the next section, we will make a conclusion of the whole essay focusing on the two main approaches, namely Dry Needling and Auricular Acupuncture.

SUMMARY

AND

CONCLUSION

SUMMARY AND CONCLUSION

As mentioned in the introduction, headaches are one of the most common medical complaints that the most people experience at some point in their life, also the cause of lots of disabilities and absence from work or school. Because of misdiagnosis of many headache conditions and sometimes neglecting the etiologies beyond classical and conventional medicine that resulted in incomplete and incorrect treatment, I decided to study and collect non-pharmaceutical methods of headache treatments in an essay, integrating the outlooks of the west and the east also the achievements of the ancient and the modern times. The essay was titled as “A descriptive study of the effects of Dry Needling and Auricular Acupuncture in Headaches”

A headache can be a sign of stress or emotional distress, or it can result from musculoskeletal imbalances, or a medical disorder such as migraine or high blood pressure, anxiety, or depression. It can occur in any part of the head, on both sides of the head, or in just one location. The International Headache Society (IHS) categorize headaches as primary, when they are not caused by another condition, or secondary, when there is a further underlying cause.

Medication, Physiotherapy including Electrotherapy, Dry Needling, Manipulation of Neck and Cervical Traction, Massage and Stretching, further **Alternative Medicine** like Acupuncture, Herbal and nutritional health products and Meditation are common practices to treat any type of headaches. Among general treatments, we studied Acupuncture focusing on Dry Needling and Auricular Acupuncture methods.

Acupuncture with the least or no side effects has been proved as a very effective treatment for most types of headaches handling the root causes of headaches not merely the painful conditions. Acupuncture has two main approaches namely ‘Traditional Chinese Acupuncture’ and ‘Modern Western Acupuncture’ called Dry Needling. In this essay, we investigated the mechanism and the benefits of various approaches of Acupuncture in relieving Headaches. Dry Needling, Chinese Acupuncture (Meridian Based Acupuncture), Scalp Acupuncture, Auricular therapy (Ear Acupuncture), Ocular Acupuncture (Eye Acupuncture), Face Acupuncture, Abdominal Acupuncture, Sujok Therapy (Hand / Foot Acupuncture) and Master Tung Acupuncture. Then the two effective categories, that is to say Dry Needling and Auricular Acupuncture were reviewed in more details.

Acupuncture is a complementary medical practice rooted in traditional Chinese medicine that entails stimulating certain points on the meridians – most often with a needle penetrating the skin – to alleviate pain or to help treat various health conditions. **Dry needling** is a technique employed by physical therapists and is similar in that a needle is inserted into the skin to alleviate pain. However, the primary difference between acupuncture and dry needling is that acupuncture treats for the purpose of altering the flow of Qi (vital energy) along traditional Chinese meridians while dry needling follows evidence-based “point” locations (Myofascial Trigger Points). Therefore, dry needling and acupuncture, while they use the same needle types, are two very different treatments. Dry needling is a therapeutic technique where a trained physical therapist inserts small, sterile, solid filament needles into the skin and muscle directly at a trigger point. The ultimate goal is to generate a “twitch response” which helps release the tension and pain located in the muscles. On the other hand, acupuncture involves the insertion of these thin needles through the skin at strategic

points of the body. It is a key component of Traditional Chinese medicine that is believed to adjust and alter the body's energy flow into healthier patterns.

TRIGGER POINT DRY NEEDLING in patients with chronic tension-type headache is effective and safe in reducing headache intensity, frequency and duration, and increasing health-related quality of life. It was proven that active TrPs were extremely prevalent in individuals with chronic and episodic Tension Type Headache. Patients with chronic Tension Type Headache had active TrPs in the extra-ocular superior oblique muscles, the sub-occipital muscles, the upper trapezius, temporalis, sternocleidomastoid, and extra-ocular rectus lateralis muscles. Additionally, patients with chronic Tension Type Headache and active TrPs in these muscles exhibited more severe headaches with greater intensity, frequency, and duration than patients with chronic Tension Type Headache and latent TrPs in the same muscles. One should keep in mind that TrPs primarily cause increased muscle tension (tonus) that limits stretch range. Also, TrPs can produce inhibition of muscle function. The overall goal of treatment is to restore normal function.

The treatment protocols for headaches in dry needling techniques are arranged on the basis of 'Regional Trigger Points for Head, Neck and Facial Pain' and 'Referral Pain Guide'.

CHINESE ACUPUNCTURE (MERIDIAN BASED ACUPUNCTURE): Traditional Chinese medicine ascribes headache to a variety of factors, among them Wind, Heat, Excessive liver Yang, Phlegm, Dampness and Deficiency, especially of the Kidney Qi. All headaches are simply due to either too much or too little Qi in the head: the former is an Excess-type headache, the latter a Deficiency-type. When the head is painful, it indicates a deficiency below and an excess above. On the contrary, when Qi cannot ascend, the head will ache. In many cases of chronic headache, there is a condition of simultaneous Deficiency and Excess.

For Shao-Yang type headaches (Pain along the gallbladder channel), the Local points (GB.4, GB.5, GB.6, GB.8, GB.9, GB.14 and GB.20 in addition to Du20, and Ex-HN-1) and the Distal points (GB.37, GB.41, SJ.3, SJ.5, LI.4, St.44, Liv.3, HT8) were selected for acupuncture. For Yang-Ming type headaches (Pain in the area of the forehead / temple that is related to Stomach channel) the Local points (Du.20, GB.4, St.7, St.8) and the Distal points (LI.4, LI.11, St.36, St.44, PC8) were selected for acupuncture. For Tai-Yang type headaches (pain at the back of the head and the neck along the urinary bladder channel), the Local points (Du.20, UB.2, UB.10) and the Distal points (UB.60, UB.67, SI.3, LI.4, LU10) were selected for acupuncture. Finally, for Jue-Ying type headaches (Pain in the area of vertex that is related to the disturbance of liver channel), the Local points (Du20, Ex-HN-1) and the Distal points (LI.4, SJ.6, Liv.2, Liv.3, Liv.14, GB.34) were selected for acupuncture.

In addition to the protocols based on radiation of the pain, we learnt the prescriptions for Tension Headache and Migraine and the benefits of important acupuncture single points on each involved meridian. We also reported Ex-HN-1, Ex-HN-5 (Taiyang), Ex-HN-3 (Yintang), Ex-HN-4 (Yuyao), Ex-HN-6 (Erjian), Ex-HN (Anmian) and Ex-HN14 (Yiming) as the most important extra points for headache and neck pain. Regarding Extra Ordinary Meridians, we learned how to select the Master and the Coupled Points. Finally, some Specific Acupuncture Local Techniques for Headaches were illustrated. For example, in Tongtianzhen Duifengci Needling Technique, two

needles were inserted against each other towards Baihui (DU20). The first from Shangxing (DU23) towards Baihui, the second from Qiangjian (DU18) towards Baihui. This technique was applied to treat the obstinate headaches.

Then, we set the ear, eye, hand, scalp, foot, abdomen and the face in the category of the **MICROSYSTEMS**. Microsystems are considered holographic images of the entire individual projected onto a particular part of the body. **Microsystems Acupuncture** is based on the belief that small well-defined areas of the body such as the hand, foot, face, scalp, eye and ear, correspond to all organs and parts of the body. Evidence shows that stimulating these areas, usually with needles, can be useful in the treatment of many disorders based on the region that is stimulated.

In **SCALP ACUPUNCTURE**, ten different scalp acupuncture systems exist. In this essay, we dealt just with the International Standard of Nomenclature for Scalp Acupuncture (ISNSA), Stimulation areas of the cerebral cortex (Jiao), Ba Gua scalp acupuncture (Liu), and Head meridians and points.

ISNSA designates 14 original lines, all of which can be applied for Headaches based on the region and type of the pain. The Lines MS1, MS2, MS3 and MS4 are located in Frontal region. The Lines MS5, MS6, MS7 (Lower third of the MS7 line is effective for headaches), MS8 and MS9 are situated on Vertex region. The Lines MS10 and MS11 on Temporal; and the Lines MS12, MS13 and MS14 on Occipital region. They are all effective for Frontal, Vertex and Temporal Headaches, besides the pain in the back of head and the neck area. In **JIAO SCALP ACUPUNCTURE**, the Areas of the Cerebral Cortex are stimulated. There are a total of 16 scalp stimulation areas in this system. The Sensory, Vision and Balance areas are utilized for Headaches. In **BA GUA (LIU) Scalp Acupuncture**, there are 11 methods of Acupuncture, nearly all of which can be applied for Headaches based on the region and type of the pain. They are Ba Gua 1–Du 20 (Bai Hui) of Small Ba Gua, Ba Gua 2–Du 20 (Bai Hui) of Medium Ba Gua, Ba Gua 3–Du-20 of Large Ba Gua, Ba Gua 4–Du 20 (Bai Hui) of Anterior Ba Gua, Ba Gua 5–Du 20 (Bai Hui) of Posterior Ba Gua, Ba Gua 6–External Occipital Protuberance Ba Gua, Ba Gua 7–SJ-20 (Jiao Sun) of Upper Ba Gua, Ba Gua 9–St-8 to GB-7 Ba Gua, Ba Gua 10–Du-24 Ba Gua and Ba Gua 11–St-8 Ba Gua. **Acupuncture of HEAD MERIDIANS and POINTS** is based on needling the Acupuncture points on the head that are assigned to treating Headaches. These points are located on the forehead, the top of the head, the back of the head and on the temple of the head.

AURICULOTHERAPY (EAR ACUPUNCTURE) is a healthcare modality whereby the external surface of the ear, or auricle, is stimulated to alleviate pathological conditions in other parts of the body. The surface of the ear is the connecting point of many meridians and nerves. Internal organ disorders will reflect on the external ear through the meridians. Acupuncture on these points is able to treat Zang Fu disease. Auriculotherapy techniques use special locations, or points, on the skin of the ear to diagnose and treat pain and medical conditions of the body. In fact, the ear is the most detailed bio-holographic image. All the Zang Fu and four extremities of the human body have regional imaging on the ear. As listed in the indications of Ear Acupuncture, Auricular therapy has a strong function to stop pain; often the pain will be relieved once the needle is inserted. To practice Auricular Acupuncture, it is important to learn Anatomical Regions of Auricular Surface and Somatotopic Correspondences to Specific Auricular Regions. Based on this correspondence system, the acupuncturist treats different diseases including headaches by needling the reflex points related to the pathology of the disease on the correspondent region.

EYE ACUPUNCTURE (OCULAR ACUPUNCTURE) is based on the relationship between the Ba Gua, five elements, and Zang Fu. Eye acupuncture locations consist of a total of four regions, eight areas, and thirteen points. As a General prescription for Headaches, Right eye upper Jiao area, left eye liver area, and Left eye gallbladder area are selected for Acupuncture.

In **FACE MICROSYSTEM ACUPUNCTURE**, two different face acupuncture systems exist: 1. Face acupuncture 2. New face acupuncture. Face Acupuncture is a safe, easy and effective way to relieve headaches. Stimulation of facial points will open the meridians, harmonize Qi and blood, and reestablish balance in the body. In Face Acupuncture, Arm Area and Forehead Area are the points for Headaches. In New Face Acupuncture System, the Face, Liver, and Kidney points are used for headaches.

ABDOMINAL ACUPUNCTURE (AA) is a micro-system of acupuncture and like other microforms, such as auricular acupuncture, all the organs and body parts are contained (reflected) within a small area. It is very versatile and can treat all-over body pain in one treatment. Today abdominal acupuncture is recognized in the treatment of all kinds of muscular–skeletal pain, many cerebro–vascular and neurological conditions, respiratory and heart disease, gynecological and psychological disorders. Abdominal acupuncture uses the area between Ren-12 and Ren-4 on the vertical line and Sp-15 as the outer most points on the horizontal lines. There are also eight specific abdominal acupuncture (Ab) points that are unique to this system. Heaven (superficial level), Humanity (middle level) and Earth (deep level) are the three layers of the abdomen in Abdominal Acupuncture. Heaven (superficial level) is the most frequently used layer and the main focus of the treatment in Abdominal Acupuncture. Abdominal Acupuncture points connected to Headaches and Neck Pain are Ren-12, Ren-11, Ren-10, Ren-8, Ren-4, Ren-6, Kid-17, Kid-18 and Kid-19. Besides, bringing Qi Home (Needling Ren-12, Ren-10, Ren-6, Ren-4), Needling Ashi Points above and around Ren-12 and Needling Ashi Points between Ren-11 and Ren-12 are prescribed for Total Headaches.

In **HAND / FOOT ACUPUNCTURE (SUJOK THERAPY)** the human hands and the feet are replica of the entire body and exact correspondence of body acupuncture points exists on the hands / feet. The Sujok Therapy uses the Main and the Insect Correspondence System. Headaches are among the diseases that can be relieved by practicing Sujok Therapy. For Headache and Neck Pain, the areas of the Main Correspondence System and the Insect Correspondence System for the head and neck are stimulated by needles or other methods of Sujok Therapy. There is sometimes eye pain accompanying particular types of headaches. In this case the zones of the eyes are needled in addition to the head zones. Eye pain may be also a separate single condition to be treated by Sujok Therapy. Sometimes the headache is caused by Sinusitis especially by the inflammation of the frontal sinuses. In this case, the zones representing the sinuses should be needled or treated otherwise. This can also be applied for neck pain, toothache, ear and jaw pain.

MASTER TUNG ACUPUNCTURE is based on the five elements and on a five zang (and six fu) channel system, different from the traditional 14 channels of acupuncture. Each point has its own pathway which directly connects to the five zang and six fu. This method became famous for using only a few needles with miraculous rapid results. The points were often referred to as "magic" because they had instant and long lasting effects. The Basis of Master Tung Acupuncture is on the Holographic Theory. The Holographic Theory in acupuncture states that a small part of the body can treat larger areas of the body. There is a numbering convention created for Non-Chinese

practitioners which helps locating the area in which the point is. Zone 1 is the fingers, zone 2 is the dorsum and palm of the hands, zone 3 is the forearms, and so on. 11.27, 22.05, 22.06, 22.07, 33.14, 44.04, 44.05, 55.02, 66.04, 77.01, 77.02 77.05, 77.06, 77.07, 77.22, 77.23, 88.28, A.02 and A.04 are Master Tung points for Headaches and the pain around the neck and the face.

DRY NEEDLING AND AURICULAR ACUPUNCTURE TECHNIQUES FOR HEADACHES

DRY NEEDLING

As you know Dry needling generates a twitch response, helping release muscle tension and pain. The goal is to release or inactivate the trigger points and relieve pain. To get the best result, we should recognize the ‘Regional Trigger Points for Head, Neck and Facial Pain’ and ‘Areas in the Head and Neck Region to which pain may be referred by Myofascial Trigger Points’. Therefore, to relieve pain in a specific region of the head or neck, the therapist needles the specific muscles on the region or around it, on the basis of precise pain guide. Hence, the selected muscles for relieving pain in any region are listed as follows:

Vertex Pain: Sternocleidomastoid (sternal), Splenius capitis.

Frontal and Sinus Area Headache: Frontalis, Temporalis, Corrugator supercilii, Procerus, Orbicularis oculi, Zygomaticus major, lateral pterygoid, Sternocleidomastoid (sternal / clavicular), Semispinalis capitis.

Temporal Headache: Trapezius, Sternocleidomastoid (sternal), Temporalis, Splenius cervicis, Sub-occipital group, Semispinalis capitis, Lateral pterygoid.

Back of Head Pain: Trapezius, Sternocleidomastoid (sternal / clavicular), Semispinalis capitis, Semispinalis cervicis, Splenius cervicis, Sub-occipital group, Occipitalis, Digastric, Temporalis, Cervical Multifidus.

Back of Neck Pain: Trapezius, Cervical Multifidus, Erector spine group, Levator scapulae, Splenius cervicis, Infrapinatus.

Throat and Front of Neck Pain: Sternocleidomastoid (sternal), Digastric, Medial pterygoid.

Lateral Neck Pain: Sternocleidomastoid (clavicular), Levator scapulae, Digastric, Medial pterygoid, Upper Trapezius.

Ear and Temporomandibular Joint Pain: Upper trapezius, Splenius cervicis, cervical erector spine, Sternocleidomastoid (clavicular), Temporalis, Masseter (deep), Lateral and Medial pterygoids.

Cheek and Jaw Pain: Sternocleidomastoid (sternal), Upper Trapezius, Masseter (superficial / deep), Digastric, Buccinators, Platysma, Orbicularis oculi, Lateral and Medial pterygoids, Zygomaticus major.

Eye and Eyebrow Pain: Sternocleidomastoid (sternal), Temporalis, Splenius cervicis, Semispinalis Capitis and Cervicis, Masseter (superficial), Sub-occipital group, Occipitalis, Frontalis, Corrugator supercilii, Orbicularis oculi, Zygomatic muscle, and Trapezius.

Toothache: Temporalis, Masseter (superficial), Zygomatic, Medial Pterygoid, Digastric (anterior).

Headache Muscles Indications and Needling Techniques

4. ORBICULARIS OCULI is indicated for Migraine, Trigeminal neuralgia, Poor eyesight, Cheek and Sinus pain. With a pincer palpation, the needle is directed perpendicular from lateral corner of the eyebrow, medially toward the trigger point of the Orbicularis Oculi Muscle.
5. PROCERUS MUSCLE is indicated for Frontal Headache. With a pincer palpation the needle is inserted perpendicular to the skin from superior to inferior from the forehead toward the nose.
6. CORRUGATOR SUPERCILII is indicated for Frontal Headaches and Pain over eyes. With a pincer palpation, the needle is inserted perpendicular to the skin from either the medial or the lateral aspect of the muscle, directed toward its mid-portion.
7. ZYGOMATIC is indicated for Pain in cheek, teeth, nose and the middle of forehead and eyebrow. With a flat palpation, the needle is fixed between the index and middle fingers of the non-needling hand, and inserted perpendicular to the skin toward the zygomatic bone.
8. MEDIAL PTERYGOID is indicated for TMJ, teeth and lateral neck pain. With a flat palpation, the needle is inserted through the skin at a shallow angle toward the medial surface of the ramus and angle of the mandible.
9. LATERAL PTERYGOID is indicated for Sinusitis, Ear, TMJ and Temporal pain. The needle is inserted perpendicular to the skin through the mandibular fossa, and directed upwards and forward deep to the zygomatic arch.
10. MASSETER is indicated for Tension headache, pain over eyebrow and in ear, cheek, TMJ and teeth. With a flat palpation the needle is inserted perpendicular to the skin toward the muscle.
11. DIGASTRIC is indicated for Lateral and front of neck pain, Dental pain (four lower incisors), Back of the Head pain, Jaw pain and Blurred vision. For the posterior belly, the needle is inserted perpendicularly to the mastoid notch towards the transverse process of the atlas. For the anterior belly, the needle is fixed between the index and middle fingers of the non-needling hand, and inserted perpendicular to the skin toward the lower part of the mandible.
12. TEMPORALIS is indicated for Headache, Toothache, Eyebrow, Ear and TMJ pain. With a flat palpation, the needle is inserted perpendicular to the skin toward the temporalis fossa.
13. EPICRANIUS (OCCIPITOFONTALIS) is indicated for Frontal Headache, Pain in the back of head, Earache, Pain behind the eyes and blurred vision. For Occipitalis Portion, the needle is conducted perpendicular, in a cephalad direction toward the trigger point of the Occipitalis portion of Epicranium Muscle. For Frontalis Portion, the needle is also conducted perpendicular, in a cephalad direction toward the trigger point of the Frontalis portion of Epicranium Muscle.
14. STERNOCLEIDOMASTOID is indicated for Temporal and frontal headache, Pain in back of head, TMJ, Eye, Cheek, Ear, and Lateral and front of neck. With a pincer palpation after identifying the carotid artery, the needle can be inserted from anterior to posterior or from posterior to anterior.

15. LEVATOR SCAPULAE is indicated for Neck and Scapular region pain. The patient is in lateral decubitus position. The muscle is needled via a pincer palpation. For the superior (cervical) portion, the muscle is felt as a ropy muscle band in lateral extent, between the anterior border of the upper trapezius and the transverse process of C1. The needle is inserted perpendicular to the skin and directed towards the practitioner's finger. For the lower (shoulder) portion, the muscle is identified over the superior medial border of scapula. The needle is inserted through the skin at a shallow angle, directed toward the upper, medial border of the scapula.
16. SPLENIUS CAPITIS is indicated for Vertex Headaches. The patient is in lateral decubitus. One finger is placed on the taut band. The needle is inserted through the skin at a shallow angle in a caudal-medial direction and directed toward the practitioner's finger.
17. SPLENIUS CERVICIS is indicated for Occipital and Temporal Headaches, and pain in Eye, Back of Neck, Ear and TMJ. The patient is in lateral decubitus. The muscle is needled via a pincer palpation. The needle is inserted perpendicular to the skin from a posterior to anterior direction directed towards the practitioner's finger at a shallow angle.
18. SEMISPINALIS CAPITIS AND CERVICIS is indicated for Frontal and Temporal Headache, and Pain in Eye and back of the head. The patient is in lateral decubitus. With a pincer palpation, the needle is directed from anterior to posterior direction towards the practitioner's finger or at a shallow angle, towards the posterior processes of cervical vertebrae or slightly laterally.
19. SUB-OCCIPITAL MUSCLES is indicated for Occipital, Temporal and Eye pain. The muscle is needled in a point midway between the transverse process of C1 and the spinous process of C2. The needle is inserted perpendicular to the skin directly in the medial half of the muscle toward the patient's opposite eye in a slightly cranial-medial direction.
20. CERVICAL MULTIFIDI is indicated for Headaches of Sub-occipital region, Back of Neck and upper scapular muscles pain. The needle is inserted perpendicular to the skin and parallel to the posterior spinous processes, about 1cm lateral to the spinous process or in a medial-caudal direction toward the lamina of the vertebra.
21. TRAPEZIUS (UPPER PORTION) is indicated for Chronic tension headache and neck pain. With a pincer palpation, the needle is kept between the fingers in the shoulder. The needle can be inserted from anterior to posterior or posterior to anterior.
22. LOWER TRAPEZIUS is indicated for the Pain in mastoid, sub-occipital and posterior neck region. Secure the taut band over a rib, between the index and middle fingers, which are placed in the intercostal spaces above and below. Insert the needle perpendicular to the skin then angle it tangentially toward the rib.

EAR ACUPUNCTURE

Auriculotherapy is a healthcare modality whereby the external surface of the ear, or auricle, is stimulated to alleviate pathological conditions in other parts of the body. The discovery of this therapy is partially based on the ancient Chinese practice of body acupuncture, yet it is also derived from the discoveries demonstrating that specific areas of the external ear were associated with pathology in specific parts of the body. Many years of academic exchange between China and Europe produced the two most popular ear maps in the world. Ear acupuncture is thus based on traditional Chinese medicine but also combines anatomy and physiology of modern medicine. Auriculotherapy for headaches involves stimulating particular points on the auricles that correspond to different organ systems in the body. TCM regards the auricular region as an important body part for clinical diagnosis and treatment, and stimulating the points on the auricle can achieve general or local effects. This is especially effective for treating headaches and migraines.

The Auricular Acupuncture Points for Headaches are selected within Anatomical Regions of the Auricle:

Trigeminal Zone, Eye Point (Master Sensorial Point), Master Omega Point (Cerebral Point), Anxiety / Worry Point, Nose Point, Maxillary Sinus Point, Frontal Sinus Point, Teeth Point, Anti-depression Point, Anti-aggression Point, and Points of Sorrow and Joy are the Headache Points on the *Lobule*.

Valium Analogue Point (Tranquilizer Point) and Laterality Control Point (Master Oscillation) are the Headache Point on the *Tragus and Supra-Tragic Notch*.

Vegetative Point II, Gonadotropin Point (Ovary Point by Chinese Nomenclature), Master Endocrine Point (Internal Secretion, Pituitary Gland) and ACTH Point are the Headache Points on the *Inter-Tragic Notch*.

Frontal, Temporal and Occipital Bone Points, Upper and Lower Jaw Points, Sensory Point, Vegetative point II, Gonadotropin Point, Thalamus Point, Sub-cortex Point (Also known as Brain zone) and Jerome Point (Relaxation Point) are the Headache Points on the *Antitragus*.

Shen-men (Spirit Gate, Divine Gate) is a Headache Point in the *Triangular Fossa*.

There are seven cervical (C1 to C7) Vertebral segments on the inferior rim of *anti-helix (Anti-helix tail)* analogous to seven cervical vertebrae. Based on irritated or involved vertebrae, Acupuncture for one or more segments of this region can relieve Neck pain, Stiff neck or Cervicogenic Headaches.

Barbiturate Analogue Point, Beta 1 Receptor Point, Temporomandibular Joint Point and Shoulder Joint Point are the Headache Points on the *Scapha*.

Point Zero (Ear Center, Solar Plexus), Weather Point, Vagina, Bosch Point or Libido Point and Ear Apex are the External Headache Points in the Region of the *Ascending Helix Branch*.

Ovary, Testis Point, Estrogen Point, Gestagen Point, Renin / Angiotensin Point, Allergy Points (Allergy Point 1 / Allergy point 2), Sympathetic Autonomic Point and Kidney Zone are the Covered (Concealed) Headache Points in the Region of the *Ascending Helix Branch*.

Heart Zone, Stomach Zone, Liver Zone, Gallbladder Zone, Pancreas Zone, Urinary Bladder Zone, Parathyroid Gland, Cardiac Plexus Point and Adrenal Gland are the Headache Points / Zones in the *Concha*. Gallbladder Point (Gb) is the most important Auricular Point for Headaches and Migraines

There are also Prescriptions for the treatment of Headaches and Migraines:

As a *general prescription* for Headaches, we needle the Heart, Kidney, Zero Point, Shen-men, Insomnia 1, Insomnia 2, Pineal gland, Master Cerebral, Thalamus and Brain points, Forehead and Occiput.

As a Prescription for *Cervicogenic Headaches, Neck Pain and Stiff Neck*, we needle Upper, Middle and Lower Cervical Ganglia, also Atlanto-Occipital Joint and Cervical segments (C1 to C7) on Anti-helix tail.

Finally, the Prescription within the *Gallbladder points* on Auricle suggests that these points can be needled for Shao-Yang Type Headaches (Pain along the gallbladder channel).

Needling Method: Select 3 to 5 points on each auricle. Insert a needle into the cartilage and then twirl rapidly for 30 seconds. Retain the needle for 30 minutes to enhance stimulation. Do this, every two days, 10 to 20 times as one course, and rest for one week before the next course.

The Comparison Between the Origin, Methods and the Effects of Dry Needling and Auricular Acupuncture to Treat Headaches

Dry Needling and Auricular Acupuncture are both important approaches to treat headaches effectively. They have similarities and differences and each method may have advantages and disadvantages in comparison to the other.

R	Distinction	Dry Needling	Auricular Acupuncture
1	Time of Development	Modern Times	Ancient to Modern Times
2	Geography of Origin	Western Countries	Originated from Eastern Countries (China); Developed in Western Countries (France)
3	Acupuncture System	Myofascial Trigger Points	Holographic Microsystem
4	Acupuncture points	Myofascial trigger points in the depth of the involved muscles	Correspondence and reflex zones and points on the auricle
5	Side of the body to treat	Mostly One side / Left or Right (Involved Side)	Both sides
6	Simplicity of Application	Partly Difficult	Partly Simple
7	Accessibility of treated region	Less Accessible	More Accessible
8	Tools of points stimulation	Needles, electroacupuncture	Needles, electroacupuncture, seeds, press needles, laser
9	Needle Manipulation	Oblique or vertical, in and out, or fan shaped manipulation	Twirling clock-wise or counter clock-wise manipulation
10	Responses of the Points	Twitch Response	De-qi Response
11	Pain while needling	More Painful	Less Painful
12	Risk of application	More Risky / Needs more caution to avoid risks of pneumothorax, puncture the arteries and peritoneum, injuring the nerves; and faints	Less Risky
13	Number of Sessions	3 to 5 sessions as one course	10 to 20 times as one course
14	Sessions Interval	Every 3 or 4 days	Every 2 days
15	Type of disorders to treat (Indications)	Musculoskeletal Pain and Spasm	Any type of pain and condition in all body systems
16	District of Effects	Almost Local	Local and General with effects on multiple conditions; General pain relieving; Relaxing and sedating effects; Opiate effect
17	Power of effects	More Powerful	Less Powerful
18	Extensiveness of Effects	Less Extensive	More Extensive

As you see in the table, Dry Needling is an achievement of the western countries in modern times while Auricular Acupuncture originated from eastern countries in ancient times and developed in western countries in recent decades. In Dry Needling the therapist attempts to find and needle the Myofascial trigger points in the depth of the involved muscles but Auricular Acupuncture utilizes the holographic microsystem and the Correspondence and reflex zones and points on the auricle. As a precaution we should keep in mind that Dry Needling is more risky than Auricular Acupuncture, so that the therapist needs more caution to avoid risks of pneumothorax, puncturing the arteries and peritoneum, injuring the nerves; and to be careful for possible fainting.

With almost local effects, Dry Needling is helpful for Musculoskeletal Pain and Spasm while Auricular Acupuncture is applied for any type of pain and condition in all body systems. The effect of Auricular Acupuncture is both local and general. It is effective for multiple conditions and general pain relieving. It has also relaxing, sedating and opiate effects. Therefore, Auricular Acupuncture has a more extensive effect in comparison to Dry Needling. It can treat many other conditions when the therapist is planning for headache treatment.

As I have been experiencing, Acupuncture is very advantageous for treating the most types of headaches. I apply all types of acupuncture based on the needs of a headache sufferer. I have been receiving more satisfactory and positive feedbacks from the headache cases than the other clients for example Knee Arthrosis or Heel Spur. Focusing on the two approaches of Dry Needling and Auricular Acupuncture, I apply both methods alternatively to utilize the advantages of either approaches. Because of the sores and inflammation in muscles after dry needling treatments, I include one session of other methods of acupuncture for example Auriculotherapy to allow the irritated muscle to recover before the following session of dry needling. Besides, the feelings and the desire of the client is an affecting factor to select the type of acupuncture method, so the program or the needling protocol may continuously change in regard to multiple factors during the course of treatment.

References:

1. McIntosh, J. (2007, June 13). What is causing this headache? Retrieved from <https://www.medicalnewstoday.com/articles/73936>
2. Gill, S. (2018, January 29). What different types of headaches are there? Retrieved from <https://www.medicalnewstoday.com/articles/320767>
3. Brown, J. (2019, April 12). Headache location determines its name. Retrieved from <https://universityhealthnews.com/daily/pain/headaches-location-determines-name/>
4. Your.MD. (2018, August 16). 5 types of headache and their locations. Retrieved from <https://www.your.md/blog/types-of-headache/>
5. Wells, D. K. (2017, October 12). Thunderclap headaches. Retrieved from <https://www.healthline.com/health/thunderclap-headaches>
6. Eske, J. (2019, January 7). What is a cervicogenic headache? Retrieved from <https://www.medicalnewstoday.com/articles/324108>
7. Wong, C. (2019, December 09). The Benefits and Side Effects of Acupuncture. Retrieved from <https://www.verywellhealth.com/acupuncture-health-uses-88407>
8. University of Minnesota (2016). What Is Acupuncture? Retrieved from <https://www.takingcharge.csh.umn.edu/what-is-acupuncture>
9. NorthShore University HealthSystem (2020). Difference Between Dry Needling & Acupuncture. Retrieved from <https://www.northshore.org/healthy-you/difference-between-dry-needling--acupuncture/>
10. Acupuncture Association of Chartered Physiotherapists (2020). What is Acupuncture? Retrieved from <https://www.aacp.org.uk/page/14/what-is-acupuncture>
11. Fernández de las Peñas, C. and J. Dommerholt: Basic concepts of myofascial trigger points (TrPs). In: Dommerholt, J. and C. Fernández de las Peñas: Trigger Point Dry Needling – an evidence-based approach. Edinburgh, Elsevier. 2013: Chapter 1:3-19.
12. McEvoy, J. Trigger point dry needling: safety guidelines. In: Dommerholt, J. and C. Fernández de las Peñas: Trigger Point Dry Needling – an evidence-based approach. Edinburgh, Elsevier. 2013: Chapter 4: 39-58.
13. Cummings MT, White AR. (2001). Needling therapies in the management of myofascial trigger point pain: a systematic review. Arch Phys Med Rehabil. 82(7):986–992. [Free Article](#)
14. Kalichman L, Vulfsons S. (2010). Dry needling in the management musculoskeletal pain. J Am Board Fam Med. 23(5):640–646. [Free Article](#).
15. Gildir, S., Tüzün, E. H., Eroğlu, G., & Eker, L. (2019, February). A randomized trial of trigger point dry needling versus sham needling for chronic tension-type headache. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6408118/>
16. Simons, D. G., Travel, J. G., Simon L. S. (2nd Ed.). (1999). Travell & Simons' Myofascial Pain and Dysfunction: The Trigger Point Manual VOLUME 1. Upper Half of Body. USA: Williams & Wilkins.
17. Fernández-de-las-Peñas, Ana Isabel-de-la-Llave-Rincón, Ricardo Ortega-Santiago, & Bárbara Torres-Chica. Deep dry needling of the head and neck muscles. In: Dommerholt, J. and C. Fernández de las Peñas: Trigger Point Dry Needling – an evidence-based approach. Edinburgh, Elsevier. 2013: Chapter 6: 69-89.
18. Niel-Asher, S. (2nd Ed.). (2008). the Concise Book of Trigger Points. California: Lotus Publishing
19. Yinyanghouse (2020). Acupuncture Point Categories and Point Categorization Theories and Clinical Applications. Retrieved from https://theory.yinyanghouse.com/acupuncturepoints/point_categories
20. Maciocia, G. (3rd Ed.). (2015). the Foundations of Chinese Medicine: A Comprehensive Text. Elsevier Ltd.
21. World Health Organization (2010). Benchmarks for training in traditional/complementary and alternative medicine: Benchmarks for training in traditional Chinese medicine. World Health Organization.

22. Maciocia, G. (2008). (2nd Ed.). *The Practice of Chinese Medicine: The Treatment of Diseases with Acupuncture and Chinese Herbs*. NY: Churchill Livingstone Elsevier.
23. Jin, Guan-Yuan. (2007). *Contemporary Medical Acupuncture: A Systems Approach*. USA: Higher Education Press.
24. Stux, G., & Pomeranz, B. (1997). (4th Revised Ed.). *Basics of Acupuncture*. Springer.
25. Focks, C. (2008). *Atlas of Acupuncture*. Elsevier Ltd.
26. Ching, N. (2017). *The Fundamentals of Acupuncture*. Philadelphia: Jessica Kingsley Publishers.
27. Mole, P. (2007). *Acupuncture for Body, Mind and Spirit*. Oxford: Spring Hill.
28. Ross, J. (2004). *Acupuncture Point Combinations: The Key to Clinical Success*. Churchill Livingstone Elsevier.
29. Junying, G., Wenquan, H. & Yongping, S. (1995). *Selecting the Right Acupoints: A Handbook on Acupuncture Therapy*.
30. *Atlas of Acupuncture Points: Point Locations* (2007).
31. Beijing College of Traditional Chinese Medicine (1995). *Essentials of Chinese Acupuncture*. Beijing: Foreign Language Press.
32. *Acupuncture Today* (2020). *Acupuncture for Headaches and Head Pain*. Retrieved from <https://www.acupuncturetoday.com/abc/headaches.php>
33. Carlsson J., Fahlcraantz A., Augustinsson, L. E. (1990). Muscle tenderness in tension headache treated with acupuncture or physiotherapy. *Cephalalgia*, 10, 131-141.
34. Hesse J., Mogelvang B., Simonsen, H. (1994). Acupuncture versus metoprolol in migraine prophylaxis: A randomized trial of trigger point inactivation. *Journal of Internal Medicine*, 235, 451-456.
35. Vincent, C. A. (1989). A controlled trial of the treatment of migraine by acupuncture. *The Clinical Journal of Pain*, 5, 305-312.
36. Vincent CA. (1990). The treatment of tension headache by acupuncture: A controlled single-case design with time series analysis. *Journal of Psychosomatic Research*, 34, 553-561.
37. Zhang, L. & Li, L. (1995). 202 cases of headache treated with electroacupuncture. *Journal of Traditional Chinese Medicine*, 15 (2), 124-126.
38. Peilin, S. (Ed.) (2011). (2nd Ed.). *The Treatment of Pain with Chinese Herbs and Acupuncture*. Churchill Livingstone Elsevier.
39. Xia, Y., Cao, X., Wu, G., & Cheng, J. (Eds.). (2010). *Acupuncture Therapy for Neurological Diseases: A Neurobiological View*. Beijing: Tsinghua University Press.
40. O' Connor, J., & Bensky, D. (1974). *Acupuncture: A Comprehensive Text*. USA: Eastland Press, Inc.
41. Claudia Fox (2006). *Atlas of Acupuncture*. China: Churchill Livingstone Elsevier.
42. Wang, Y. (2009). *Micro-Acupuncture in Practice*. UK: Churchill Livingstone Elsevier.
43. Elnaggar YM, Alnaggar DY, Altaweel FM, Elnaggar MY. (2017). New Mandible Microsystem in Pain Therapy. *International Journal of Pain Relief*, 1(1), 020-025.
44. FHT (2020). *Microsystems Acupuncture*. Retrieved from <https://www.fht.org.uk/therapies/microsystems-acupuncture>
45. Xinnong, C. (2009). *Chinese Acupuncture and Moxibustion* (3rd Ed.). Foreign Languages Press. 513-514.
46. Terry, O. (2014). *Auriculotherapy Manual, Chinese and Western Systems of Ear Acupuncture* (3rd Ed.), Elsevier Limited.
47. *An Introduction to Auriculotherapy: Its Origin and Benefits*. Retrieved from <http://bravenchanne.net/auriculotherapy/>
48. Lennard, T. A., Singla, A. K., Walkowski, S., Vivian, D. G. (Eds.). (2011). *Pain Procedures in Clinical Practice* (3rd Ed.), Elsevier, 139-154.
49. Fogoros, R. N. (2019). *Health Benefits of Ear Acupuncture*. Retrieved from <https://www.verywellhealth.com/the-benefits-of-ear-acupuncture-88711>
50. Wikipedia. (2020). *Auriculotherapy*. Retrieved from <https://en.wikipedia.org/wiki/Auriculotherapy>

51. Teachmeanatomy (2020). The External Ear. Retrieved from <https://teachmeanatomy.info/head/organs/ear/external-ear/>
52. Beate, S. (2001). Ear Acupuncture: A Precise Pocket Atlas Based on the Works of Nogier/Bahr. Thieme.
53. Verlag, G. T. (2006). Microsystem Acupuncture: Ear—Scalp—Mouth—Hand / Hans Ulrich Hecker, Elmar Peuker, Angelika Steveling.
54. [https://www.researchgate.net/publication/7816014 Ear acupuncture in the control of migraine pain Selecting the right acupoints by the needle-contact test](https://www.researchgate.net/publication/7816014_Ear_acupuncture_in_the_control_of_migraine_pain_Selecting_the_right_acupoints_by_the_needle-contact_test)
55. Shipsey, D. (2015). Mastering the Art of Abdominal Acupuncture: A concise guide to treating numerous painful conditions. Ireland: Gemini International Dublin.
56. Abdominal acupuncture is at the centre of your health. Retrieved from <https://www.wicklowyoga.com/therapies/abdominal-acupuncture/>
57. Find Out Why Abdominal Is Phenomenal. Retrieved from <https://www.abdominalacupuncture.net>
58. Stan, J. (January, 2019). Abdominal Acupuncture: A Micro-system with superpowers. Retrieved from <https://www.easterncurrents.ca/for-practitioners/practitioners%27-news/eastern-currents-news/2019/01/02/abdominal-acupuncture---a-micro-system-with-super-powers>
59. Ivanov, P. (2002). Sujok and Moxa: A self-treatment manual (Electronic Ed.). Bulgaria: Mediks Ltd.
60. Woo, P. J. (1994). Sujok for Everybody. Jaipur India: SUJOK Academy.
61. Woo, P. J. (1991). Sujok Therapy. Acupuncture Series, Basic Therapy Course / Seoul, Korea: International Sujok Acupuncture Association.
62. Seth, S. (2013). Sujok: The healing touch. Traditional Medicine, 2 (10).
63. Costa, A. (2016). Tung's Acupuncture: Study Notes on Master Tung's Acupuncture, Principles and Techniques, with 46 Points Locations and Indications (3rd Ed.). China: Creative Commons.
64. Chuan-Min Wang (2013). Introduction to Tung's Acupuncture (Edited by Steven Vasilakis). USA: Chinese Tung Acupuncture Institute.
65. Lee, M. (2002). Master Tong's Acupuncture: An Ancient Alternative Style in Modern Clinical Practice (2nd Ed.).

Appendix

Appendix-1

The press interviews, Visits and talks to the world's prominent Acupuncturists on international events by the writer of the essay

Appendix-2

Practice of different methods of Acupuncture for Headaches by the writer of the essay

Appendix-1

**The press interviews, Visits
and talks to the world's
prominent Acupuncturists on
international events by the
writer of the essay**

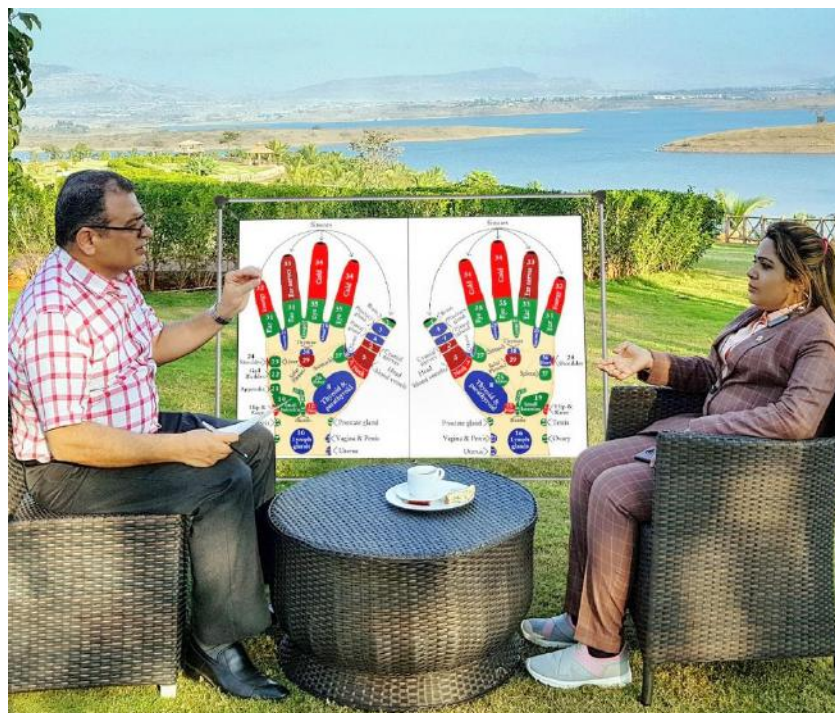
The press interview with **Dr. Luo**, a professional Chinese Acupuncturist taken in China which was published online on June 30, 2019 on the International Iranian News Agency Website (ISNA):

<https://en.isna.ir/news/98040904519/Everything-you-need-to-know-about-Acupuncture>



The press interview with **Dr. Kulsum Wahedkalam**, an Indian certified Sujok Therapist, taken in India which was published online in the International Iranian News Agency Website (ISNA):

<https://en.isna.ir/news/98062310747/Sujok-Therapy-your-health-in-your-hands>



Visit and talk to **Prof. Jan Dommerholt**, the American Prominent Dry Needlist and the author of Trigger Point Dry Needling: An Evidence Based & Clinical Based Approach.



Visit and talk to **Prof. Liu Baoyan**, the President of World Federation of Acupuncture-Moxibustion Societies (WFAS).



Receiving the international qualification certificate of Acupuncture Doctor from **Prof. Liu Baoyan**, the President of World Federation of Acupuncture-Moxibustion Societies (WFAS).



Visit and talk to **Dr. Lan Haibing**, Director of the Dermatology Department of Beijing Gulou Traditional Chinese Medicine Hospital.



Visit and talk to **Dr. Chen Luquan**, the instructor and examiner of International Proficiency Test for Acupuncture in the World Federation of Acupuncture-Moxibustion Societies (WFAS) and the Head of the Acupuncture-Moxibustion Department in Beijing Tongren Hospital.



Visit and talk to **Dr. Nadali Esmaeili**, the board member of the World Federation of Acupuncture-Moxibustion Societies (WFAS) in Beijing, China.



Clinical Course of Acupuncture in Beijing Gulou Traditional Chinese Medicine Hospital.



Appendix-2

Practice of different methods of Acupuncture for Headaches by the writer of the essay

Neck and Shoulder (Dry Needling / Acupuncture)





Dry Needling for Epicranium Muscle on the head (the Occipitalis and the Frontalis Portion)



Dry Needling for Orbicularis Oculi Muscle on the face



Auricular Acupuncture





Scalp Acupuncture





Regular and Master Tung's Acupuncture





Abdominal Acupuncture



Face and Eye Acupuncture







