Scalp Acupuncture for Treating the Face

Michelle Gellis

Abstract

This article is excerpted from the newly-published text *Treating the Face: A Comprehensive Guide for Acupuncturists and Health Professionals* by Michelle Gellis. It consolidates the material published by the author in previous issues of the *Journal of Chinese Medicine,* providing a pragmatic clinical introduction to scalp acupuncture - a clinically valuable modern method that can be used to support the treatment of a multitude of pathologies affecting the face.

Keywords
Scalp acupuncture, facial acupuncture, stroke, hemiplegia, cosmetic acupuncture

The brain is wider than the sky.
– Emily Dickinson

The modern scalp acupuncture system began in the late 1950s and was popularised in the 1970s. Its development is attributed to Dr. Shunfa Jiao, the founder of modern scalp acupuncture, and Dr. Mingqing Zhu. Dr. Jiao developed scalp acupuncture techniques and mapped out specific scalp areas corresponding to different body parts. His work laid the foundation for the systematic application of scalp acupuncture.[1]

Dr. Zhu was a prominent acupuncturist and neurologist who further expanded the concepts and techniques of scalp acupuncture. He worked closely with Dr. Jiao and contributed to developing and refining scalp acupuncture protocols. Dr. Zhu's clinical experience and research helped establish scalp acupuncture as a recognised therapeutic modality.[2]

Scalp acupuncture primarily stimulates brain areas to facilitate the functions governed by these areas. Based on neuroanatomy (not acupuncture theory), the scalp is stimulated with acupuncture needles over the specific areas of the brain that have been damaged or are not functioning correctly. Scalp acupuncture is uniquely suited for conditions related to neurological issues.

My interest in scalp acupuncture began before I attended acupuncture school. When my youngest child was just six weeks old, he was diagnosed with oculocutaneous albinism and nystagmus. His vision was classified as legally blind, and the nystagmus made it worse. While researching his condition, I read an article in the *British Journal of Ophthalmology* describing how acupuncture could help with nystagmus.[3] When my son was 12 weeks old, I sought out acupuncture treatment for him. Fortunately, we lived in Albuquerque then, where Dr. Jason Hao, one of the world's leading experts on scalp acupuncture, has his practice. Dr. Hao started treating my son as an infant, and the improvement in his nystagmus was astounding.

The effects I saw inspired me to study acupuncture. After graduating, I chose to specialise in women's health and cosmetic acupuncture. As I began treating patients for cosmetic concerns, people also began contacting me with neurological facial concerns, and I began to incorporate scalp acupuncture into my treatments for stroke, Bell's palsy, and other conditions described in this chapter.

The brain and the homunculus

A cortical homunculus (from the Latin homunculus, "little man, miniature human") is a distorted representation of the

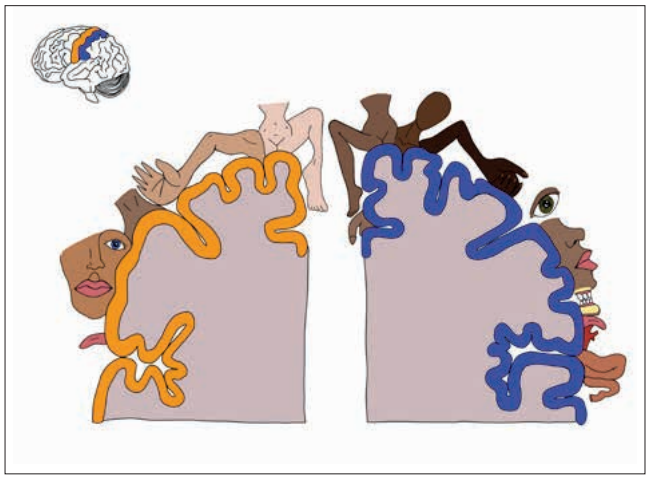

Figure 1: Cortical homunculus

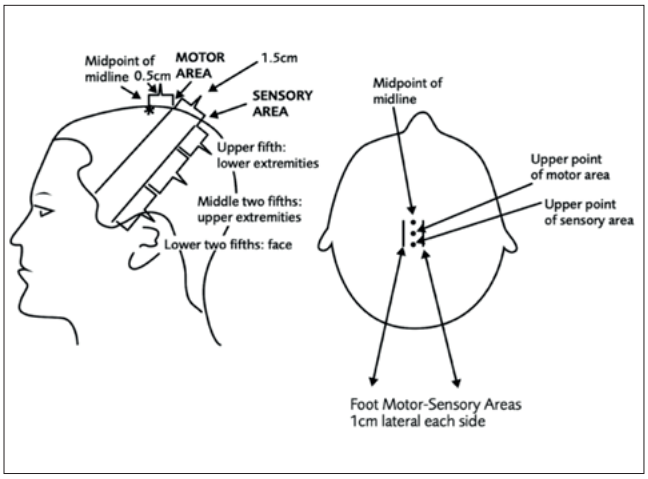

Figure 2: Motor, sensory and foot motor-sensory areas

human body based on a neurological "map" of the areas and proportions of the human brain dedicated to processing motor functions or sensory functions for different parts of the body (Figure 1).[4]

Look at the homunculus of the body superimposed on the brain and note that the face takes up a very large area of the brain, indicating its importance in sensory perception and motor control. The lower two-fifths of the brain's motor and sensory areas control the face, indicating a substantial portion of the brain is dedicated to processing sensory information from the face and orchestrating motor movements of the facial muscles. The middle two-fifths control the upper extremities, hands, arms, and fingers, and the top one-fifth controls the lower extremities: body, legs, and toes in the motor area, and body, legs, and genitals in the sensory area.

Understanding the relationship between the brain and the homunculus helps explain why scalp acupuncture can profoundly affect facial conditions. By stimulating the scalp, particularly the areas corresponding to the face on the homunculus, signals are believed to be transmitted to the brain, influencing the neural pathways involved in facial function and promoting therapeutic effects.

Moreover, scalp acupuncture can also impact other areas of the body. The statement "The middle two-fifths of the homunculus control the upper extremities (hands, arms, fingers) while the top one-fifth controls the lower extremities (body, legs, toes)" suggests that scalp acupuncture may have broader implications beyond facial conditions, potentially influencing various body parts and functions associated with the respective regions on the homunculus (Figure 2).

Two scalp areas are primarily used for treating neuromuscular facial conditions:

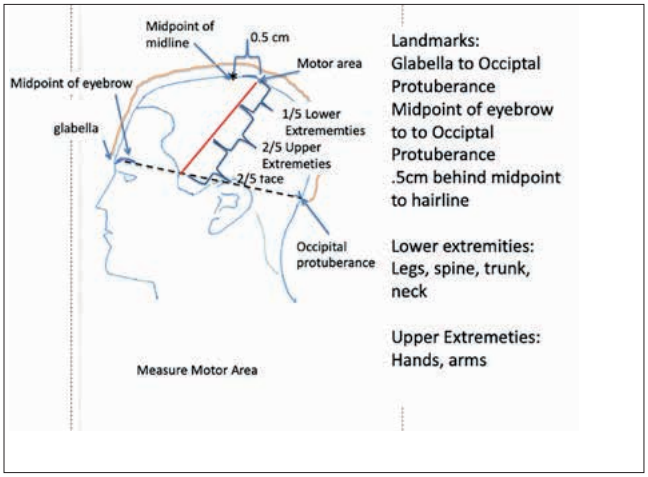

Figure 3: Scalp measurement

Motor area

The motor area pertaining to the face is primarily used for paralysis or weakness in the face caused by stroke, multiple sclerosis (MS), Bell's palsy, or brain injury. As noted earlier, motor issues are treated on the opposite side of the face from the patient's symptoms. Treating the opposite side of presenting symptoms affects the homunculus of the brain's motor gyrus. If you have treated the face of an affected patient a few times and have not seen an improvement, you can treat both sides of the face. However, scalp acupuncture can be uncomfortable, especially in the areas related to the face, so only treat both sides if necessary.

Sensory area

The sensory area of the face is primarily used for people with abnormal sensitivity reactions in the face. They can be overly sensitive in their face or lack sensitivity. These reactions can include tingling, numbness, loss of sensation,

Figure 4a: Measuring the scalp-midline

Figure 4b: Measuring the scalp-horizontal

and pain involved in conditions such as trigeminal neuralgia, temporomandibular joint (TMJ) syndrome, MS, and shingles. For the sensory area, treatment generally occurs on the same side as the patient's symptoms. Treating the same side as presenting symptoms treats CN V and CN VII. However, if symptoms do not improve after a few treatments, try needling both sides of the head.

Motor issues are treated on the opposite side of the face from the patient's symptoms.

Foot motor-sensory area

The foot motor-sensory area can also be added to the treatment. I refer to this area as the "ST-36" of scalp acupuncture because, like ST-36, it helps treat many different conditions. It overlies many endocrine glands (pituitary and adrenal) that help treat hormonal concerns and is commonly used for treating paralysis of the legs, phantom pains, neck and shoulder pains, irritable bowel syndrome (IBS), impotence, uterine and bladder prolapse, and shingles. It is easily located and well tolerated when needling.

Scalp measurement

To perform scalp acupuncture correctly, you must first learn how to measure the head. Two landmarks are important when performing scalp acupuncture. The first is the midpoint of the midline, found along the midline connecting the glabella to the occipital protuberance, 0.5 cm posterior to this midpoint. The second landmark is found at the (lateral) anterior hairline along the imaginary line running across the lateral side of the head, connecting the midpoint of the eyebrow to the occipital protuberance (Figure 3).

To measure, use two hands and anchor the thumb and index finger of either hand at the occipital protuberance and the glabella. This will give you the midline (Figure 4a). Next, anchor the thumb and pinky of either hand at the occipital protuberance and the middle of the eyebrow (Figure 4b). Connecting these two imaginary lines toward the hairline indicates the motor area (the red line in Figure 3).

The bottom two-fifths of the motor area are the areas to the needle when treating the face. The middle two-fifths of the motor area corresponds to the upper extremities, and the upper one-fifth corresponds to the lower extremities.

To find the sensory area, measure 1.5 cm posterior to the first landmark on the top of the head (0.5 cm posterior to the midpoint of the midline) between the glabella and occipital protuberance. The upper part of this sensory area line corresponds with the lower extremities, the middle two-fifths corresponds to the upper extremities, and the lower two-fifths corresponds to the face.

The foot motor-sensory area is on the top of the head. It runs 1.0 cm lateral to the midline from the midpoint back to the sensory area.

Considerations when needling the scalp

Many patients are sensitive to having their scalp needled, so you may want to first needle GV-24 and/or ear Shenmen when performing scalp acupuncture. Your patient may feel a sensation in their face or the area being needled, such as heat, cold, tingling, numbness, or heaviness. Retain the needles for 20 to 30 minutes. If the patient is experiencing

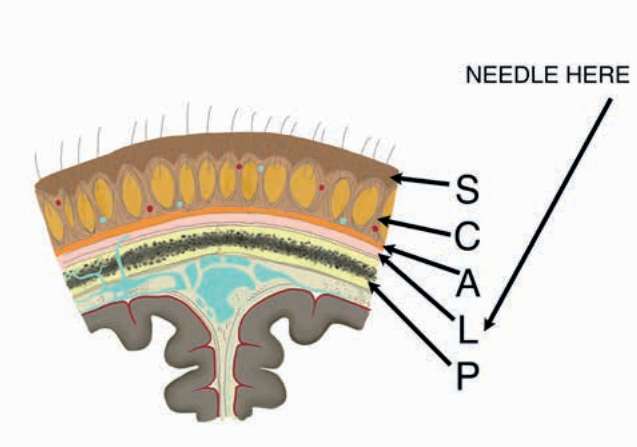

Figure 5: Area of scalp to needle

Figure 6a: Needle insertion

weakness/paralysis and pain, such as those with Bell's palsy, you can needle the sensory and motor areas simultaneously.

Scalp acupuncture is contraindicated in patients with unclosed fontanelles, anyone who has had surgery on the scalp, scar tissue on the scalp, or any type of implant or stents. Other contraindications for scalp acupuncture are high, uncontrolled blood pressure, pregnancy, seizure disorders, and nervous or hungry patients who have not eaten.

To needle the scalp correctly, you must know the different layers of the scalp. The top layer is the skin. The second layer below is the close connective tissues, cutaneous vessels, and nerves. You don't want the needle point to stay in this second layer. The third layer below these two is the aponeurosis (epicranial aponeurosis), and the fourth layer is the loose connective tissue. The layer of loose connective tissue is the area you want to needle. The fifth layer is the pericranium, the periosteum of the skull bones (Figure 5).

When needling the scalp, angle the needle correctly so it goes into the loose connective tissue.

Before you needle the scalp, needle ear Shenmen or GV-24 (or both) to help relax the patient. When needling the scalp, angle the needle correctly so it goes into the loose connective tissue. You can freehand the needle if you like, but I prefer using a tube because it helps me guide the needle to the correct depth. When needling, I press and hold the tube against the scalp at a 15-20-degree angle (Figure 6a). Then, I tap the needle in, remove the tube, and use my free hand to press on the scalp and guide the needle down into the loose connective tissue (Figure 6b). You will know the needle is in the loose connective tissue if the patient feels little to no pain. If your patient does experience pain, remove the needle completely and reinsert after asking your patient to take a deep breath.

For scalp acupuncture, use a fairly heavy gauge needle, 36G or 32G (0.20 or 0.25mm) and 40 mm or 50 mm long. When needling the scalp, insert the needle quickly because needling tentatively or slowly can cause pain. The needle can be inserted into the handle.

Once the needle is inserted, gently stimulate it for 30 seconds by twisting it back and forth (Figure 6c). You can repeat this every 10 minutes. When stimulating the needle, ask your patient to try to move the body part that is paralysed or affected. Retain needles for at least 30 minutes. When removing the needle, have a cotton ball ready to apply pressure and reduce bleeding.

I don't use electrical stimulation in my practice. But if you want to use electricity, it is usually recommended to needle in pairs, one motor point connected to one sensory point or one on each side. Electricity should be set at 100 to 105 Hz for the sensory area and 3 to 40 Hz for the motor area.

The opposite side of the scalp to the affected area is treated for motor issues, whereas for sensory problems, the same side is treated. For foot motor-sensory issues, both sides of the scalp are treated.

For more information on scalp acupuncture, I recommend Hao and Hao's text, *Chinese Scalp Acupuncture*.[5]

Figure 6b: Needling the scalp

Figures 6c: Needling the scalp

Michelle Gellis is a licensed and Board Certified acupuncture physician. She served as a faculty member and clinic supervisor at the Maryland University of Integrative Health from 2004 to 2020 and holds the distinction of being one of the few acupuncturists in the US certified to teach cosmetic acupuncture certification classes on a national level to other acupuncturists. In addition to facial rejuvenation, Michelle teaches classes on facial cupping, gua sha and neuromuscular facial conditions. In 2024 she published *Treating the Face: A Comprehensive Guide for Acupuncturists and Health Professionals*. She can be contacted through her website at <www.facialacupunctureclasses.com>.

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