# Acupuncture and Facial Rejuvenation

In traditional Oriental medicine, facial rejuvenation is achieved by inserting acupuncture needles at different points along designated *channels* to attain *tonification* or *sedation* effects. According to the author, treatment benefits include elimination of some wrinkles and decrease in length and depth of others, decrease of facial edema, decrease of acne, improvement of facial muscle tone, improved skin texture with tighter pores, and decrease of sagging around the eyes, cheeks, chin, and neck. (*Aesthetic Surg J* 2004;25:419-424.)

acial rejuvenation with acupuncture is complementary to aesthetic plastic surgery as an adjunct or alternative to other procedures. Many younger patients and established patients needing maintenance do not require major surgery and can greatly benefit from such a noninvasive approach. Additionally, perioperative protocols for those with more advanced findings are being developed, since this treatment would most likely improve results as a component of aesthetic surgery similar to physical therapy for orthopedic surgery. In a sense, it is cosmetic therapy.

The goal of traditional Oriental medicine (TOM) in facial rejuvenation is to enhance facial muscle and skin tone to its optimum level without injections or surgery. TOM is a holistic approach that addresses the entire body when treating localized conditions or anatomy. In this model, as overall health and wellness are restored, the face is rejuvenated.

Many factors such as diet, exercise, and stress have been shown to affect aging at the clinical and cellular level. According to TOM, the face is a reflection of the function of the internal organs. Similarly, according to Western medicine, a person with healthy circulation, digestion, and sleeping patterns will not only feel healthier and younger but will also look healthier and younger. Here, I will discuss the foundations of TOM, pointing out how these principles are applied in medicine and, specifically, in facial rejuvenation. I will also discuss the use of acupuncture and herbal treatments.

## Foundations of Traditional Oriental Medicine

Traditional Oriental medicine is based on the laws of nature as documented about 5000 years ago by Taoist monks from ancient China. Without benefit of science or technology, they made the reasonable assumption that



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the same laws that govern nature must be universal, governing not only the external world but also our internal health.<sup>2</sup> They noted simple concepts such as, "water always flows down," and "fire always burns up."

The concepts became more complex, especially when describing movement and transformation. The monks could not identify the force that transformed a seed into a tree or transformed day into night. Thus, they formulated the concept of Qi (pronounced "chee"), defining it as the energy force responsible for all movement and transformation in the universe.<sup>3</sup>

They divided Qi into 2 parts, yin and yang. Daytime and summer, with external activities at their height, are examples of yang. Nighttime and winter, when internal activities prevail, are examples of yin. Further, they observed that the yin and yang aspects of Qi must be balanced to sustain life, and different levels of balance sustain different levels of life. Just as different types of flora and fauna thrive in unique environments, different human lifestyles are associated with tropical climates versus arctic climates.

Similarly, the concepts of Qi and yin and yang balance can be applied to the human body. Exercise may be considered a yang activity, while sleeping may be considered yin. Different balances of exercise and sleep will sustain different levels of health and wellness.

The Taoists then mapped the flow of Qi through the body, distinguishing yin from yang. Qi flows through 12 basic channels; 6 channels are yang and 6 are yin. Each channel flows through a major organ and is associated



Figure 1. Electroacupuncture treatment.

with specific physiological functions that may or may not be associated with that organ.

The basis of TOM is to manipulate the balance of yin and yang internally to maximize health. For example, the Greater Yin Channel of the Foot flows through the spleen and pancreas, beginning on the medial aspect of the first phalanx of the foot and traveling through the arch, medial aspect of the ankle and leg, through the genitalia, and up the stomach to the chest, where it then flows internally and finally manifests on the lips. Based on the organs through which this channel flows, TOM teaches that this channel can be used to treat digestive disorders, blood quality, and lymph drainage. Because of the location of the channel, it is clear why it can treat ankle and knee pain and genitalia problems.

These are just a few examples of how this channel is used to balance the internal yin and yang to promote optimal wellness.

The other 11 channels work similarly. Although a thorough balance of all yin and all yang channels must be achieved for optimal health and facial rejuvenation, following are the major channels used in facial rejuvenation and the aspects of those channels that most strongly affect the face:

 The Greater Yin Channel of the Foot, which runs upward, providing muscle tone and holding up organs, can be also used to tighten flabby skin under the eyes, on cheeks, and under the chin.

- The Brighter Yang Channel of the Foot flows through the stomach, and so is also used to aid in digestion. It begins directly below the pupil on the lower eyelid, flows down the cheek to the corner of the mouth, out toward the angle of the mandible, up toward the hairline, and then internally downward, surfacing on the neck. From the neck it flows down the chest, abdomen, torso, and continues down the anterolateral aspect of the leg through the center of the dorsal side of the foot, ending at the lateral tip of the second phalanx. Due to its location on the face, it can be tonified to assist the Greater Yin Channel of the Foot in maintaining muscle tone on the eyelids, cheeks, and under the chin. (In this context, the definition of tonify is "to stimulate in order to increase the energy level.")
- because it travels through the lungs, manifests on the nose, and is responsible for maintaining healthy skin. In terms of facial rejuvenation, tonifying this channel will keep pores closed and aid in tightening skin and imparting a smoother texture with fewer wrinkles.
- The Lesser Yin Channel of the Foot travels through the kidneys and, when tonified, will eliminate under eye darkness and facial edema. This channel also promotes thick, shiny hair and moist skin.
- The Ultimate Yin Channel of the Foot flows through the liver and, when sedated, will assist in brightening

Table. TOM diagnosis and acupuncture treatment

Traditional diagnosis/organ related to affected channel	Typical clinical manifestation	Distal bodily points used in treatment	Local facial points used in treatment
Qi deficiency in the Brighter Yang of the Foot/Stomach	Poor digestion; poor muscle tone around eyes, on cheeks, and under chin and jaw	Su San Li (St 36), 2 to 3 cun* distal to patela, 1-finger-breadth lateral to crest of tibia.	Dicang (St 4), lateral to the corner of the mouth; Jiache (St 6), 1-finger- breadth anterior and superior to the lower angle of the mandible
Qi deficiency in the Greater Yin Channel of the Foot/ Pancreas and Spleen	Poor digestion, poor muscle tone around eyes, on cheeks, and under chin and jaw	Sanyinjiao (Sp 6), 2 to 3 cun superior to medial malleolus	Same as above
Qi deficiency in the Greater Yin Channel of the Hand/Lung	Poor skin tone and texture with loose pores	Lieque (Lu 7), superior to the styloid process of the radius 1 to 1.5 cun above the transverse crease of the wrist	
Excess heat and fluids in the Greater Yin Channel of the Hand/Lung	Acne, poor skin tone and texture with loose pores	Chize (Lu 5), on the cubital crease, on the radial side of the tendon of m. biceps brachii. Found with the elbow slightly flexed	Not applicable
Yin deficiency in the Ultimate Yin Channel of the Foot/Liver	Lack of expression in eyes, blurry vision	Taichong, (Lv 3), on the dorsum of the foot, in the depression distal to the junction of the first and second metatarsal bones	Not applicable
Yin deficiency in the Lesser Yin Channel of the Foot/Kidney	Darkness under eyes, facial edema	Taixi (K 3), in depression between medial malleolus and tendon calcaneus at level with tip of medial malleolus	Quanliao (SI 18), directly below the outer canthus, in the depression on the lower border of zygoma; Tinggong (SI 19), anterior to the tragus and posterior to the condyloid process of the mandible

<sup>\*</sup>One cun is equal to the width of the interphalangeal joint of the patient's thumb.3

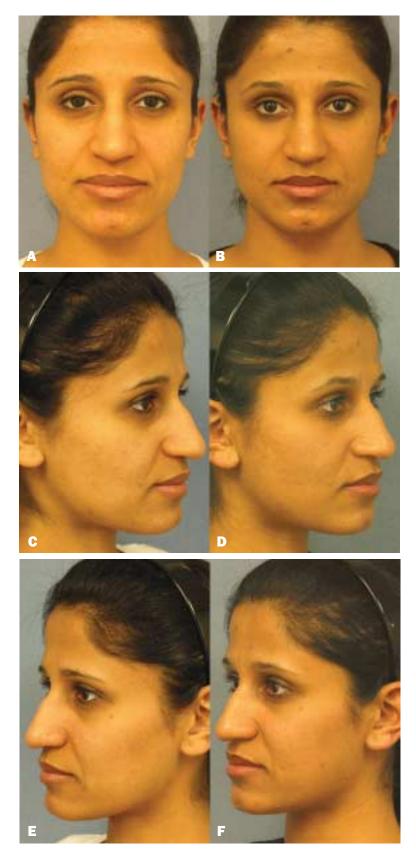
the eyes and clearing redness. It may also be used with the Greater Yin Channel of the Hand to improve acne.

#### **Acupuncture Technique**

Needles are used at different points along the channels to promote either a tonifying or sedating effect. Tonification techniques are used in patients who have flabby skin that is not adherent to underlying muscle and overlies poor muscle tone. Sedation techniques are used in areas with tense muscles that can benefit from relaxation. Tonification methods can be used to promote blood circulation. Sedation methods can be used to reduce inflammation and acne.

Tonification and sedation can be accomplished manually or with the use of a transcutaneous electrical nerve

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**Figure 2. A, C, E,** Pretreatment views of a 26-year-old woman requesting reduction in the prominence of her nasolabial folds. **B, D, F,** Posttreatment views 30 minutes after the last of 10 acupuncture treatments (as described in Table).

stimulation (TENS) device connected directly to the needle (electroacupuncture).<sup>3</sup> In electroacupuncture, an intermittent current of 2 Hz will be more tonifying, a constant current of 16 Hz or more will be more sedating, and an alternating current can be use to tonify and sedate simultaneously, promoting Qi and blood flow. The amount of time a needle remains inserted will determine its tonifying or sedating effect. Generally, 20 minutes or less is tonifying, while 30 minutes or more is sedating. Tonification can be further enhanced with the use of a heating technique called *moxibustion*.<sup>3</sup>

Needles used on the face, inserted subcutaneously, are generally .5 inches long and .18 mm thick. Needles used elsewhere on the body, ranging in thickness between .18 to .32 mm, are generally 1 to 3 inches long, depending on the depth of the tissue and anatomical location. Generally, the thicker the needle, the stronger the effect. Needle thickness is limited by patient comfort levels and patient Qi reserves (or internal strength).

### **Ancillary Herbal Treatment**

Herbs, which may be topically applied or orally ingested, are prescribed based on the same TOM principles as acupuncture. Each herb is classified as tonifying, sedating, or neutral. Herbs are further classified by the channels that they primarily affect and their specific functions, such as moistening skin, improving acne, or correcting skin discoloration. I generally prescribe herbs in a well-balanced formula with a minimum of side effects.

Although boiled decoctions of raw herbs are most effective, I prescribe capsules or tablets because they increase patient compliance. A commonly used herbal formula in facial rejuvenation is *Bu Zhong Yi Qi Tang*<sup>4</sup> or *Tonify the Middle and Augment the Qi Decoction*. Because this tonifying formula primarily affects the Greater Yin and Brighter Yang Channels of the Foot, it is akin to stimulating the acupoints Su San Li and San Yin Jiao. Therefore, it will improve or maintain muscle tone on the eyelids, cheeks, and under the chin. In addition, because these channels enter the stomach, pancreas, and spleen, this formula will improve digestion and, ultimately, skin tone.

A commonly used single herb in facial rejuvenation is *Zhen Zhu Mu*<sup>5</sup> or *Concha Margarita* (Mother of Pearl Powder). This sedating herb enters the Ultimate Yin Channel of the Foot which, according to TOM, will improve blurry vision, clear redness of the eyes, and impart a brighter look to the eyes. This herb also helps reduce inflammation and generates tissue repair.<sup>5,6</sup> When

applied topically, it is used to treat stubborn acne and help prevent acne scarring.

### **Facial Rejuvenation Treatment Plan**

A typical treatment course is 10 sessions, and usually a maximum of 3 treatment courses is recommended. Each treatment course may focus on a distinct facial area, such as the neck, cheek and jowls, or forehead. Some patients will need more treatments than others. Sessions are administered at least once weekly, with a maximum of 3 treatments per week with a 1-day hiatus between treatments. Following a complete treatment course, I recommend monthly maintenance visits. Treatments can be enhanced with self-massage and suggested dietary guidelines, including herbal remedies.

A treatment point typically used is *Su San Li*, which is just below the anterolateral aspect of the knee and on the Brighter Yang Channel of the Foot. This point is usually stimulated and will assist the Greater Yin Channel of the Foot to improve or maintain muscle tone of the eyelids, cheeks, and under the chin. Another commonly used point is *San Yin Jiao*, located in the depression about 2 to 3 inches above the medial malleolus. This point is on the Greater Yin Channel of the Foot and is frequently combined with Su San Li to enhance its effects.

#### **Results**

The effects of treatment can be expected to persist for up to 5 years. The best way to judge progress is with photographs. The following treatment results may be expected:

- Elimination of some wrinkles and a decrease in length and depth of other wrinkles.
- Decrease of facial edema.
- Increase of facial muscle tone.
- Livelier appearance of the eyes.
- Decrease of sagging around the eyes, cheeks, chin, and neck.
- Improved skin texture, including tighter pores.
- Decrease of acne.

## **Case Presentation**

An example of a TOM diagnosis and treatment in a 26-year-old woman seeking facial improvement, especially reduction in nasolabial fold prominence, is provided in the Table and Figures 1 and 2. The patient demonstrates facial edema and slightly poor muscle tone around the eyes and cheeks. Additionally, she has moderate nasolabial folds, bilaterally, with some mild blemishes. The treatment plan addresses all of the patient's excesses and

deficiencies, strengthening Qi and yin in the respective channels and draining heat and fluids as indicated.

Local facial points designated for treatment were addressed with electroacupuncture on needles with 2 Hz for 20 minutes at approximately 5 milliamperes (Figure 1). Needles were inserted 1 to 2 mm at .5-inch intervals along the nasolabial folds to strengthen local Qi and blood circulation while promoting collagen formation. Additional needles were inserted on the face and scalp to augment the effect of the treatment.<sup>7</sup> A heating technique called *moxibustion* was used on distal points for added stimulation effect.

The patient received a total of 10 treatments over a period of 1 month. She was also prescribed a traditional Chinese herbal formula, *Shi Quan Da Bu Tang*, 6 to strengthen Qi and yin in all the necessary areas, as well as *Concha Margarita* to improve skin tone and relieve acne. Due to the patient's extreme sensitivity, smaller needles (.5 inches long and .18 mm wide), were used in all points.

Pre- and posttreatment views demonstrate subtle improvements in all problem areas except for acne and pore size (Figure 2). I attribute the lack of improvement in acne and pore size to the patient's diet, which included heavy use of piquant spices that contribute to excess heat in the lungs.8 Improvements can be seen in the right and left nasolabial folds, which shortened and decreased in depth about 50% and 20%, respectively. The patient demonstrates complete bilateral elimination of lines above the eyes, and a 50% reduction of depth and 20% reduction of length of lines under the eyes. A tighter skin tone (similar to a chemical peel) with less facial edema is apparent. Although the patient did not originally complain of fatigue or digestive problems, she noted an increase in energy and better regulated digestion. I have recommended 2 more identical treatment courses with the same herbal formula and elimination of piquant spices from her diet.9

Although some improvements may seem subtle to a surgeon's eye, patients are well aware of changes from an improved sense of well being with a well-rested look to a significant reduction in wrinkles. Given these clinical results and increasing scientific support of TOM, 10 the Western population is becoming more aware of its benefits. Aesthetic surgeons increasingly are looking at adding this ancient modality to their state-of-the-art practice to bring it to the forefront of comprehensive care.

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