



The Stimulation of Additional Acupuncture Points to Enhance the Treatment of Macular Degeneration and Other Retinal Diseases

In its most basic form the use of microcurrent stimulation for the treatment of retinal disease and other eye conditions is a local treatment, with the stimulating current applied only to points around the eyes. The use of the glasses with electrodes applies the stimulation only to the eye through the closed eyelids. In the protocol that I use for the treatment of macular degeneration and other degenerative retinal diseases, I instruct the people to stimulate specific additional points away from the eyes, for I have found that this adds to the effectiveness of the treatment. In this chapter, I will describe how these additional points on the arms, legs, body and ear are used and the rationale for their use. There will also be some discussion of how acupuncture can be used as a complementary procedure to enhance overall health and therefore the health of the eyes. An appendix at the end of this chapter will discuss the acupuncture theory behind the choice of the eye points that are the core of the treatment.

Let me anticipate your question, “How can the stimulation of points on the arm or the leg or the ear affect my eye disease, or other problems I might have?” The desire of the Western scientific mind to want an answer to the question, “Why?” is very strong, yet there is so far a very poor understanding of why acupuncture works. The Office of Alternative Medicine at the National Institutes of Health has been studying acupuncture since 1995. In their first consensus paper on acupuncture in 1997, they concluded that the empirical data showed clearly that acupuncture works, but that the answer as to why it works would have to wait. To quote the National Institutes of Health, “While it is often thought that there is substantial research evidence to support conventional medical practices; this is frequently not the case. This does not mean that these treatments are ineffective. The data in support of acupuncture are as strong as those for many accepted Western medical therapies. One of the advantages of

acupuncture is that the incidence of adverse effects is substantially lower (close to zero) than that of many drugs or other accepted medical procedures used for the same conditions.”(1) To quote one of my old acupuncture professors, “ Don’t bother asking why! Just use it (acupuncture) and if it doesn’t work for you, don’t use it anymore.”

I use it, and it works. I use it because it works.

In the theories and understanding of health and disease upon which acupuncture is based, there is a very holistic view of a human being. The top of the body is connected to the bottom of the body, the inside is connected to the outside and the body and the mind and the spirit of a person are all a part of the same whole. The choice of points for an acupuncture treatment is a subject too complex to cover here, but typically, in addition to the treatment of local points around the eyes, the classical acupuncture treatment protocols call for the treatment of points away from the eye, on the body and on the arms and legs and hands and feet. As an example, one of the points included in many protocols for the treatment of eye disease is a point called *Bright and Clear* which is point #3 on Meridian VII, the Foot Shao Yang meridian. (2)

In Japanese acupuncture, there has been an extensive interest in the use of microcurrent stimulation as a form of “needleless acupuncture”, a stimulation therapy applied to the acupuncture points to treat a wide variety of diseases. There are two techniques from the Japanese that I use extensively, called *Akabane* testing and *Ryodoraku* therapy. Both of these techniques begin by first measuring electrical conductivity at specific acupuncture points. A sensitive instrument such as the MicroStim®400 is needed to make these sorts of measurements. If there are abnormalities detected, a treatment is given using either needles or a microcurrent stimulator to stimulate specific points. It is quite a remarkable thing to see how the simple insertion of an acupuncture needle or the application of a small amount of microcurrent stimulation at an acupuncture point on the forearm can change the electrical measurements at an acupuncture point on the foot. Following the treatment, which is painless, the measurements are repeated and the treatment is continued until the measurements are brought back to normal. There are many physicians in Japan who use these types of therapies as a sort of simplified

(1) National Institutes of Health Consensus Development Statement on Acupuncture November 5, 1997"

The complete document may be found at the National Institutes of Health Web Site at

<http://odp.od.nih.gov/consensus/>

(2) The point names are given as the Pinyin transliteration of the Chinese name first, followed by an English translation of the point name, followed by the numeric designation of the point used commonly in acupuncture textbooks in this country. A description of how to locate the point then follows. (The point locations have been chosen that maximize the effects of microcurrent stimulation therapy, and may vary slightly from the point locations described in modern textbooks of Oriental Medicine.)

acupuncture. I can testify from my own experience that these are quite effective therapies, though these procedures are more effective and powerful in the context of a more thorough and complete acupuncture treatment and attention to the whole of a person's health.

The MicroStim®100 series of microcurrent stimulators for home use are not capable of making the measurements needed to perform the *Akabane* or *Ryodoraku* therapies. Still, from the extensive literature on these therapies it is clear that the stimulation of acupuncture points with microcurrent stimulation does produce an acupuncture-like effect. To enhance the therapy provided by the treatment of the points immediately around the eye, I instruct my patients to include in their treatment the stimulation of a series of points away from the eye. In addition, I stimulate a number of points on the ear, using theories taken from the French physician and acupuncturist Dr. Paul Nogier. The French have refined the use of acupuncture points on the ear to a high degree and there are in fact acupuncturists who treat using ear points almost exclusively, with good results.

Selection of Points for Placement of the Ground Electrode

The use of microcurrent stimulation for the treatment of eye disease is not an acupuncture treatment, yet the development of the protocols for the treatment of eye disease relied in large part on acupuncture theory. Acupuncture alone can be considered simply a form of stimulation therapy, and there have been extensive efforts to develop protocols of treatment using acupuncture needles for the treatment of various eye diseases. Treatments using acupuncture needles were actually mildly effective in the treatment of retinal disease but frequent treatments were needed which required frequent visits to a practitioner. In our office, we do include acupressure (needleless acupuncture) as part of our treatment protocol (Acu-Eye Points) These Acu-Eye Point treatments are done by the person themselves, in their home. With the significant advancements in the technology of the microcurrent stimulators, the treatment with microcurrent stimulation therapy combined with the use of acupressure has proven far more effective than the techniques with needles and has replaced them.

The microcurrent stimulation unit designed by MicroStim® Technology is the unit of choice for all of the physicians I know that are treating retinal disease. The same specifications that make this unit so effective for the treatment of retinal disease make it an acceptable unit for use in the Japanese needleless acupuncture techniques

mentioned above. There are many inexpensive electrical stimulators on the market, and it must be emphasized that the majority of these are not adequate for the treatment of retinal disease or for use in the specific types of electrical acupuncture treatments I refer to above. There have been tremendous advances in the technology of electrical stimulation, and I cannot emphasize enough how important it is that you use the best technology possible if you wish to get the best possible results. An inexpensive machine could at worst actually do harm to your vision, and at the very least would provide ineffective therapy.

The current from all of the MicroStim® units is delivered as an alternating phase current, meaning that the polarity of the current switches each second. It is not important that you understand this, but the result of this design feature is that treatment is delivered at both the handheld probe on the MicroStim®100 and at the ground electrode. Since you are delivering treatment to the point where you place the ground electrode, there are particular ground points that I instruct people to use as one of the ways of providing some treatment at points away from the eyes. There are multiple points that I instruct people to use for the ground electrode and I advise them to choose a different point each day, as there are some mild but undesirable consequences of using the same ground point day after day. There is nothing unsafe about using the same ground point day after day, but over time, it can make the treatments less effective.

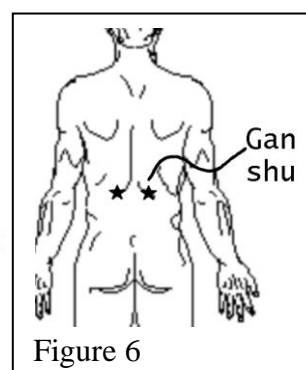
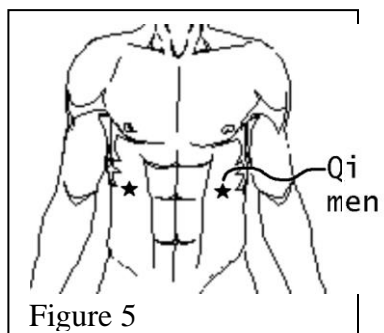
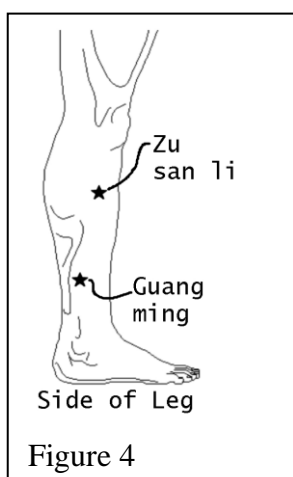
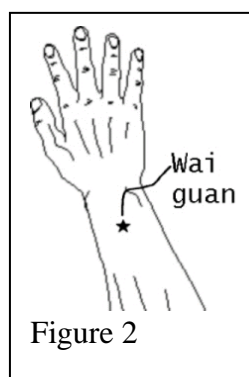
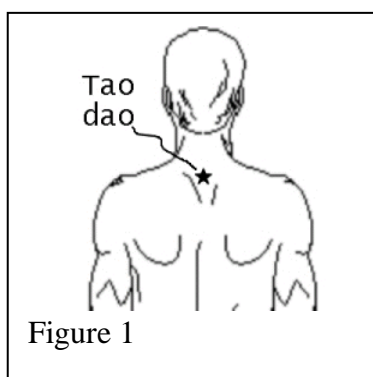
The seven points recommended for the placement of the ground electrode are:

1. Tao dao (Kiln Path), Point 13 on the Governor Vessel Meridian, located between the first and second thoracic vertebrae on the posterior midline. (**Figure 1**)
2. Wai guan (Outer Frontier Gate), Point 5 on the Arm Shao Yang Meridian, located two fingers' width above the wrist joint on the posterior forearm, between the radius and ulna, approximately where your watch would sit. (The point is found on both arms.) (**Figure 2**)
3. Yin bao (Yin Envelope), Point 9 on the Leg Jue Yin Meridian, located one hand's width above the knee crease, on the medial surface of the thigh. (The point is found on both legs.) (**Figure 3**)
4. Guang ming (Bright and Clear), Point 3 on the Leg Shao Yang Meridian, located about five inches above the ankle bone on the outer surface of the calf, at about the point where the top of your socks would hit. (The point is found on both legs.) (**Figure 4**)
5. Zu San li (Leg Three Mile), Point 36 on the Leg Yang Ming Meridian, located

about three inches (four finger widths) below the knee on the outside of the leg. (The point is found on both legs.) (**Figure 4**)

The following points are also possible points that could be used for placement of the ground electrode:

6. Qi men (Gate of Hope), Point 14 on the Leg Jue Yin Meridian, located at the top of the abdomen on the inferior edge of the rib cage, in line with the nipple on either side. (**Figure 5**)
7. Gan shu (Liver Correspondence), point 18 on the Leg Tai Yang Meridian, located two fingers width lateral to the midline of the back, at the level of the interspace between the spinous processes of the ninth and tenth thoracic vertebrae, on either side. (**Figure 6**)



Points Away From the Eye to Include in the Treatment

What follows are points away from the eye that I sometimes include in the treatment. Treatment with microcurrent stimulation produces what the scientists refer to as a “field effect”. This means that there are changes in the electrical properties of

the entire body, no matter where the stimulation is applied. Electrical resistance in the tissues is lowered, and this is a beneficial effect. When you treat the points around the eyes, you can measure changes in the electrical resistance of the tissues of the feet. These electrical changes in the body are beneficial, but treatment of the eyes alone does not produce enough of this effect. For this reason, points are included on the neck and arms, which serve to enhance this effect for the entire body, which in turn has further benefit for the eyes. In addition, the treatment of the points on the back of the neck results in a decrease in the excess muscle tension that most people have in this area, which improves blood flow to the brain and eyes.

The inclusion of these extra points assumes that you are using a unit with a hand-held probe. If you have an automatic unit, for instance the MicroStim® 100-iLE, then you would treat the points described below using the techniques you use when doing the Acu-Eye acupressure points (needleless acupuncture).

The addition of these points to your treatment may seem daunting at first, but don't despair. There are a finite number of points, and they are done in a very repetitive fashion so you will learn them quickly. (3) You may want to consult with Dr. Miller or your practitioner for help with learning the point locations if you have trouble with the instructions given here. Also, your practitioner can help you to determine which specific points will be best for you. I use these points with my patients, and I feel it adds to the success I have had in bringing improvement in vision using microcurrent stimulation for the treatment of macular degeneration and other retinal diseases.

Points on the Arm:

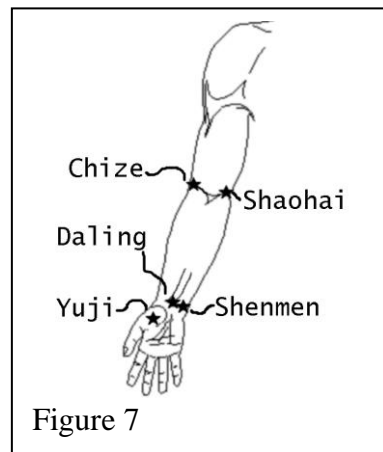
There are ten points in all, five on each arm. (*Figure 7*) There are three points at each wrist. One is in the center of the fleshy pad on the palm at the base of the thumb. The other two are on the wrist crease as shown on the diagram. There are two points on the inside of the elbow, at either end of the elbow crease. (*See Figure 7*) These points are named:

- 1) Yu ji (Fish Border), Point 10 on the Arm Yang Ming Meridian, located in the middle of the fleshy pad on the palm at the base of the thumb.
- 2) Da ling (Great Mound), Point on the Arm Jue Yin Meridian, located in the

(3) The following instructions apply only to those using the MicroStim® 100 unit, the non-automatic unit. For ALL the points away from the eyes, set the Wave Form switch to Square Wave, set the frequency switch to F2 (9.1 cycles) and treat each point for 12 seconds. The points away from the eyes may be treated once a week for the first six months of treatment. After six months, treat these points once every two weeks. On those days when you treat the points away from the eyes, treat them first, then finish with the treatment of the eye points.

middle of the crease on the palmar side of the wrist, between the palmaris longus tendon and the flexor carpi radialis tendon.

- 3) Shen men (Spirit Gate), Point on the Arm Shao Yin Meridian, located on the crease on the palmar side of the wrist, in the depression on the radial side of the flexor carpi ulnaris tendon.
- 4) Shao hai (Little Sea), Point 3 on the Arm Shao Yin Meridian, located at the medial end of the elbow crease (Locate with the arm flexed)
- 5) Chi ze (Outside Marsh), Point 5 on the Arm Yang Ming Meridian, located at the lateral end of the elbow crease (Locate with the arm flexed)



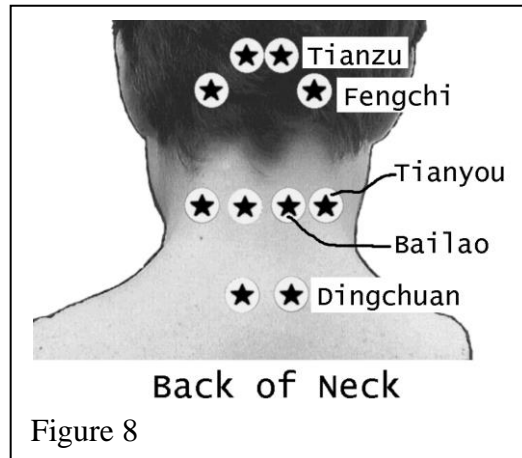
Points on the Back of the Neck:

There are ten points in all (five pairs), which are shown on the diagram. (**Figure**

8) These points are named:

- 1) Tian zhu (Heavenly Pillar), Point 10 on the Leg Tai Yang Meridian, located one finger's width lateral to the midline on the back of the neck, at the base of the occipital bone of the skull.
- 2) Feng chi (Wind Pond), Point 20 on the Leg Shao Yang Meridian, located lateral to Tian zhu at the base of the occipital bone of the skull, in the depression between the trapezius and sternocleidomastoid muscles.
- 3) Tian you (Heavenly Window), Point 16 on the Arm Shao Yang Meridian, located on the major crease across the rear of the neck, about two finger's width below the hair line, at a point three finger's width to the side of the midline of the back of the neck.
- 4) Bai lao (Hundred Labors), An Extra Point, located on the major crease across the rear of the neck, about two finger's width below the hair line, at a point one finger's width to the side of the midline of the back of the neck.

- 5) Ding Chuan (Calm Breath), An Extra Point, located one finger's width to the side of the midline of the back of the neck, at the level of the seventh cervical vertebrae.



An option for the treatment of the Back of the neck is to use the accessory hand-held probe with the mushroom shaped tip and some lubricating gel (such as Arnica Gel or Electrode gel). Gently massage the whole area on the back of the neck and the top of the shoulders. This can be very effective at relieving tension in this area, which can help to improve blood flow to the brain and eyes. Some people find this treatment of the back of the neck extremely relaxing, and choose to do it more often than once a week. It is fine and safe to treat these points away from the eyes more often if you choose.

Points on the Ear:

The ear points that I typically use are shown in the accompanying diagram. (*Figure 9*) When I have the benefit of working with someone in my office, I often tailor these points to the individual but the 10 points shown would provide a good starting point for those who wish to include treatment of the ear points in their eye treatment protocol.

Only treat one ear at each weekly treatment. For example, if you treat the right ear one week, treat the left ear only the next week. (One option for choosing which ear to treat is to squeeze the earlobes. If one earlobe is more swollen and sensitive, treat the more sensitive ear.)

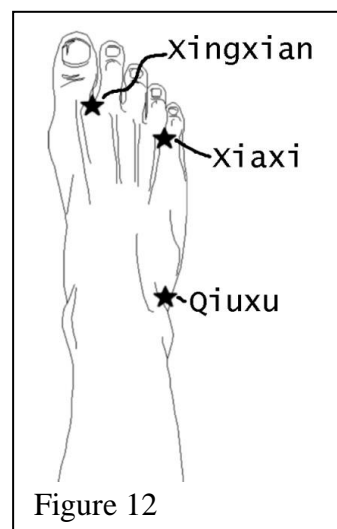
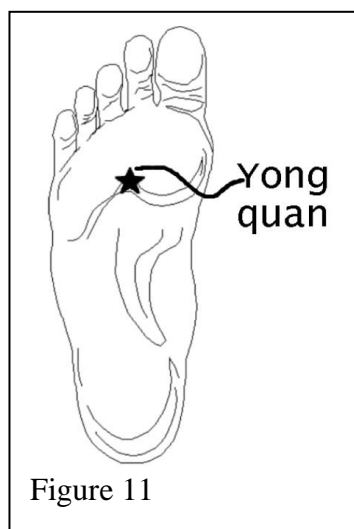
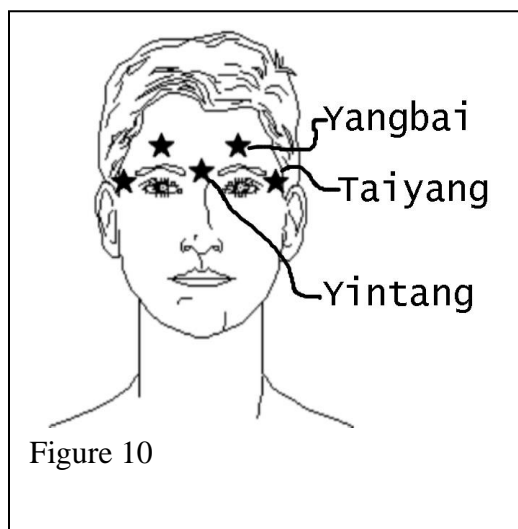


Additional Points to Include in the Treatment:

There is a point on the midline of the face midway between the medial ends of the two eyebrows named **Yin tang** (Seal Hall) (*Figure 10*) which I include in the treatment of the eye points. After the eight points around one eye are done, this point is done. The eight points around the other eye are then done, followed again by this point. The eyes are treated three different times at three different frequencies, and as a result, this point gets treated for a total of six times during the treatment of the eye points.

When I am treating someone in my office, there are several points that I palpate, and if they are tender or sensitive, I instruct them to include these points in their treatment. Press firmly on the following points, and if you find any of them to be sensitive or tender, include them with the other points away from the eyes that you treat once a week. (See the diagrams that follow.)

- 1) Yang bai (Yang White), Point 14 on the Leg Shao Yang Meridian, located on the forehead one finger's width above the midpoint of the eyebrow. (*Figure 10*)
- 2) Tai yang (Highest Yang), An Extra Point, located in the middle of the temple, one finger's width behind and slightly below the lateral tip of the eyebrow. (*Figure 10*)
- 3) Qi men (Gate of Hope), Point 14 on the Leg Jue Yin Meridian, located at the top of the abdomen on the inferior edge of the rib cage, in line with the nipple on either side. (One of the points for placement of the ground electrode) (*Figure 5*)
- 4) Zu san li (Leg Three Miles), Point 36 on the Leg Yang Ming Meridian, located by placing ones palm over the kneecap. The point lies where the tip of the middle finger touches the lateral edge of the tibia. (*Figure 4*)
- 5) Yong quan (Gushing Spring), Point 1 of the Leg Shao Yin Meridian, located on the sole of the foot in the crease that forms between the second and third metatarsal bones when the toes are flexed. (*Figure 11*)
- 6) Xing jian (Walk Between), Point 2 on the Leg Jue Yin Meridian, located on the top of the foot in the space between the big toe and the second toe. (*Figure 12*)
- 7) Xia xi (Valiant Stream), Point 43 on the Leg Shao Yang Meridian, located on the top of the foot in the space between the fourth toe and the fifth (little) toe. (*Figure 12*)
- 8) Qiu xu (Wilderness Mound), Point 40 on the Leg Shao Yang Meridian, located in the hollow in front of the lateral malleolus of the ankle. (*Figure 12*)



Classical Acupuncture as a Therapy Combined with Microcurrent Stimulation

The care of your eyes and the repair of damage that comes as the result of years of degeneration require a body that is operating at its fullest and healthiest capacity. Microcurrent stimulation therapy is not a panacea or a miracle cure but a technology that can bring incredible improvements in the ability of cells of the eye to function and utilize energy and regenerate. As a result, the cells of your eyes work better, and you may see better. The body does not function as a set of independent organs and for this technique to be most effective, there must be an attention to a person's overall health as well as to the specific problems related to the eye. The many supplements that are used help to replenish and augment the many systems in the body that fight against degenerative damage and also provide the nutrients that are necessary for cells to repair themselves and maintain their structural integrity. Discussion of how a person can go further to maximize the overall state of their health in a way that will ultimately benefit their eyes is important if people are to derive the maximum benefit from the technology of microcurrent stimulation therapy.

Why do we combine microcurrent stimulation therapies with Acupuncture? Acupuncture and Oriental Medicine differ from Western allopathic medicine in how they view the cause of disease, and what they see as the underlying problem that needs to be addressed. Still, the reality is seen in the person with the disease. If you have a degenerative disease such as macular degeneration, that is the reality. You may talk about it with the language of acupuncture or consider it as Western medicine does with

the language that speaks of an irreversible, progressive and untreatable disease. From the differing perspectives that acupuncture offers, come different ideas of how treatment might be approached and these differing approaches to treatments are often quite effective. Systems such as acupuncture consider disease in the context of the entire person and the treatments that derive from this perspective can be very useful.

The system of Classical Acupuncture that I use when I treat people in my office is tailored to the needs of the individual that I am treating. I am constantly looking for what the person needs, and trying to provide that for them in the treatment. It is not a cookbook approach. I do not treat everyone who comes to me for the treatment of their eye disease with Classical Acupuncture, but if they live locally, and especially if they are troubled with various other medical problems, I strongly recommend an individualized course of treatment with acupuncture in addition to their treatment with microcurrent stimulation therapy and the other components of the Better Eye Health Program. I do not feel that acupuncture alone is an adequate treatment for macular degeneration or other retinal diseases, because alone it does not bring the same successful results that I have had with microcurrent stimulation and the other components of the Better Eye Health Program. For some people though, the addition of treatment with Classical Acupuncture has definitely brought further improvement in their vision.

Finally, there are many factors that affect health which are beyond the scope of this paper but which are critical to a person's total health, mostly common sense, and which need to be at least mentioned. Exercise, a healthy and balanced diet and adequate sleep are critical to health. Maximum health is impossible if you are consumed by emotional or job related stress and it is prudent to learn techniques of stress reduction. If you have diabetes or other diseases that affect the vascular system, it is critical that these diseases be treated aggressively. Smoking tobacco in any form seriously compromises the small vessel circulation and anyone with retinal disease who smokes would be advised to stop. Alcohol is a toxin to the central nervous system, including the eyes and the use of alcohol should be done with extreme moderation or not at all. If you drink because you have heard that there are studies that have shown some positive health benefits from an occasional glass of wine, know that these benefits come with as little as one glass of wine per week. Raw, unfiltered red or purple grape juice has been shown to provide similar benefits to wine. If you are still sexually active, a healthy sex life is important to health and you need to be open with your physician. If there are problems with sexual dysfunction the most common cause of sexual dysfunction is the side effects produced by many prescription medications. In

addition, many prescription drugs can have adverse effects on the eyes in someone with macular degeneration. Dosages can be adjusted and drugs substituted to minimize these unwanted effects, but only if your physician is aware that problems exist. In short, you need to have as your goal the best health possible.

APPENDIX

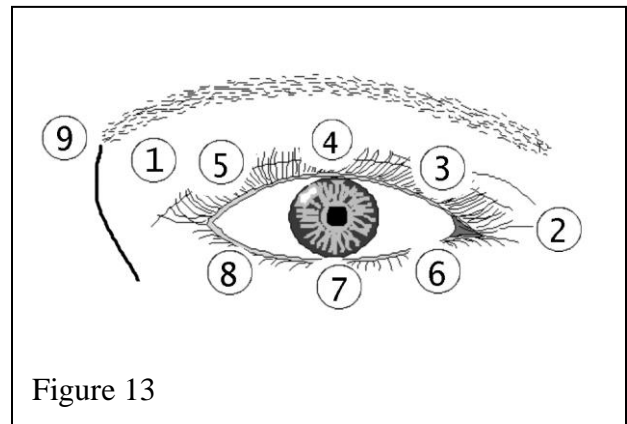
Acupuncture Theory and the Points Used To Treat the Eye

Stimulation of the eight points around the eyes is the core of the treatment of retinal disease with microcurrent stimulation therapy. I include an extra point (*Yin tang*) described below. The points treated are all acupuncture points used to treat various eye diseases, and their names and locations are described below. These points can be treated individually with a manual MicroStim® unit and a hand-held probe. With the development of the automatic MicroStim® 100-iLE unit we use electrodes over the closed eyes, held in place with a Velcro strap. With this strap, you are essentially treating all of the points at the same time. The use of the strap is easier to learn and more convenient, and produces the same positive results.

The points are numbered, (**Figure 13**) and it is recommended that you treat the points in the order given. There are two reasons for this. First, the points *Jing ming* (Bright Eyes) and *Tong zi lao* (Orbit Bone) are two of the most useful points for the treatment of eye disease, and so it is desirable that they be done first. Second, it is good practice in doing a repetitive treatment like this to do the points in the same order each time. You will be doing this treatment daily, and it quickly becomes automatic. It is easy to let your attention wander, lose your concentration and forget where you are at in the treatment, and as a consequence, forget to do all of the points. For the sake of good habits, it is recommended that you always do the points in the same order, and the order given below is suggested.

The ninth point *Yin tang* (Seal Hall) is added because it provides especially strong and useful stimulation to the optic chiasm, the place where the optic nerves from both eyes come together behind the middle of the forehead in the center of the brain.

The points used for treatment around the eye (**Figure 13**) are named:



1. Jing ming (Bright Eyes), Point 1 on the Leg Tai Yang Meridian, located in the hollow adjacent to the nose, on the upper lid just above the medial canthus of the eye.
2. Tong zi liao (Orbit Bone), Point 1 on the Leg Shao Yang Meridian, located lateral to the lateral canthus of the eye on the rim of the orbit, which is the bony structure we refer to as the eye socket. All of the other points lie just inside the bony orbit, except Yang ming.
3. Si zhu kong (Silk Bamboo Hollow), Point 23 on the Arm Shao Yang Meridian, located on the upper eye lid midway between the lateral canthus and the middle of the upper eye lid, below the eyebrow.
4. Yu yao (Middle Corner), An Extra Point, located at the midpoint of the upper eye lid, below the eyebrow.
5. Zan zhu (Collect Bamboo), An Extra Point, located on the upper eyelid, midway between the medial canthus and the midpoint of the upper eyelid (Yu yao), just lateral to Jing ming (see above).
6. Qiu hou (Behind the Hill), An Extra Point, located on the lower eye lid midway between the lateral canthus and the middle of the lower eyelid, on the inner edge of the orbital bone.
7. Cheng qi (Contain Tears), Point 1 on the leg Yang Ming Meridian, located at the midpoint of the lower eyelid on the inner edge of the orbital bone.
8. Dai jing (Surround Eyes), An Extra Point, located on the lower eye lid midway between the medial canthus and the midpoint of the lower eyelid (Cheng qi) on the inner edge of the orbital bone.
9. Yin tang (Seal Hall), An Extra Point, located on the midline of the face midway between the medial ends of the two eyebrows.

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