# Pressure Points for Self-Defense and Healing

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## Introduction

A knowledge of the ancient Asian healing arts can be incredibly beneficial to a martial artist for both fighting and healing. An understanding of where the body is most susceptible to pain can give your techniques—be they holds, chokes, or strikes—an added impact. In addition, pressure point attacks impair the ability of your opponent and so give you a strong advantage. A knowledge of pressure points can also allow you to take care of your own injuries and the injuries of the people you train with. Familiarity and experience with these healing practices will make you a more valuable member of your dojo and a more fearsome opponent. This paper will discussing the origin of pressure point techniques and their applications in both healing and self-defense.

# **Origins**

Five thousand years ago in China, when weapons consisted of stones, spears, axes and arrows, a curious discovery was made. Soldiers reported that when they were struck during battle in certain areas of their bodies, life long illnesses and maladies would suddenly vanish.<sup>1</sup> This relationship between trauma

and recovery helped lay the groundwork for the meridian based understanding of the body. Through trial and error, physicians of the time charted the points on the body that seemed to stimulate healing, relieve pain and regulate energy. A holistic method of hands-on healing then grew from this knowledge.

Similar practices could also be found in India at around the same time, and some time later, in Japan. Acupuncture was first introduced into Europe in the 17<sup>th</sup> Century. Today, articles about Eastern-style medicine can be found in many of the most prominent Western medical journals. There have been 45 such articles in the New England Journal of Medicine alone. These ancient healing arts are rapidly becoming a broadly accepted adjunct to Western medicine.

Currently, over 4,000 students are enrolled in acupuncture and Oriental medical colleges in the United States, and the majority of U.S. medical schools now offer courses on complementary medicine. According to the American Association of Oriental Medicine, an estimated 12,000 nationally certified acupuncturists were practicing in the United States in 1998.<sup>2</sup>

The basis of Eastern medicine as it has been practiced for 5,000 years is the concept of qi or chi (life energy). "The Qi consists of all essential life activities which include the spiritual, emotional, mental and the physical aspects of life." Qi is also known as ki in Japan and prana in India. It is believed that meridians, or pathways, in the body distribute this energy to all of its systems. Qi is thought to be an intricate current that flows through the universe and relates the body to everything around it.

As with other aspects of Eastern philosophy, the body is viewed in terms of yin and yang-light and dark. Yin force is described as passive, cold, receptive and internal. Yang force is considered active, hot, productive, and external. It is thought that this balance of opposite energies creates a vibratory movement and energy flow. Pain comes when this gi flow is interrupted and the yin and yang become unbalanced. Pressure points, also known as acupoints tsubos, are spots on skin that conduct bioelectrical impulses. They can be thought of as whirlpools of qi. These points were discovered and mapped out by healers gradually over several thousand years. There are over 2000 identified pressure points but only 750 of them are commonly used. With the confluence of Eastern and Western medicine in the last 100 years, many new points have been discovered. A British Acupuncture website points out that.

In the past thirty years, because of the huge public interest in the subject, considerable scientific research on acupuncture has been carried out—although much remains to be done. We now know much more about how acupuncture works and some of the myths can be laid to rest. It is demonstrably untrue to say that the results of acupuncture are *all in the mind.*<sup>4</sup>

When points are mildly stimulated with finger pressure, needles, heat, or cold, pain-relieving neuro-chemicals are released into the bloodstream. As a result, circulation is increased in the area and muscles relax. Qi then flows freely through the tsubo.

Pain can be caused by muscles that are chronically tense and have a build up of lactic acid. Gentle pressure on the tsubo can stimulate blood flow in the area and help flush out the built-up toxins and while bringing more oxygen and nutrients to the area. Current research shows that acupuncture has the ability to influence most of the body's systems. Clearly acupuncture has an effect on the nervous system, but it can also alter muscle tone, hormone outputs, circulation, antibody production and allergic responses. Acupuncture has been shown to affect the respiratory, digestive, urinary, and reproductive systems as well. Acupuncture is defined as the use of very thin needles inserted into exact locations, tsubos, on the surface of the body. The intent of this treatment is to influence physiological functioning. It is a science that requires immense precision and therefore excellent training. Acupressure is a style of healing that uses the same theories as acupuncture, but applies pressure to the points with non-invasive techniques. It does not require the same amount of accuracy and therefore does not require the same amount of training. In addition to the physical benefits of these styles of Eastern medicine there are emotional benefits.

Acupressure can also help restore emotional balance by releasing the accumulated tension caused by repressed feelings. When blood, oxygen and bioelectric energy circulate properly, we have a greater sense of harmony, health, and well being.<sup>5</sup>

This is not to say that application of a violent force to a pressure point in combat will engender a feeling of emotional well being! On the contrary, it will likely bring about the opposite reaction. The differences between gentle and aggressive pressure point treatment will be expounded upon later. When a tsubo is located in the same area as the pain, it is called a local point. For example, applying pressure to the temples to relieve the pain of a headache that seemed centered on your temples would be considered usage of a local point. When the pain is in a different part of the body than the point you are touching, the tsubo is referred to as a trigger point. The sensation of pain in an area that is disparate from the tsubo is a clear indicator that our bodies are connected in surprising ways. For example, application of pressure to the proper tsubo in the shoulder region can cause a painful sensation lower in the arm.

Pressure points are located on meridians (or channels). There are two primary categories of meridians in Chinese medicine. They are known as regular meridians, which are related to the organs and extraordinary meridians (or "strange flows"), which regulate qi. In some theories, the extraordinary meridians are said to act as reservoirs of qi for the regular meridians. Of the extraordinary meridians, the central channel is the most important.

It is the ruling energy channel of the body and soul, and vital to the well being of the individual. All organ meridians exchange energy with this channel. Regular meridians are bilateral and consist of an interior (yin) and exterior (vang) pathway. The exterior pathway is marked by pressure points. The interior pathways relate to the organs. Connecting vessels branch off from the regular meridians and link complimentary yin and yang meridians. Yin meridians flow up the body and yang meridians flow down the body.<sup>7</sup>

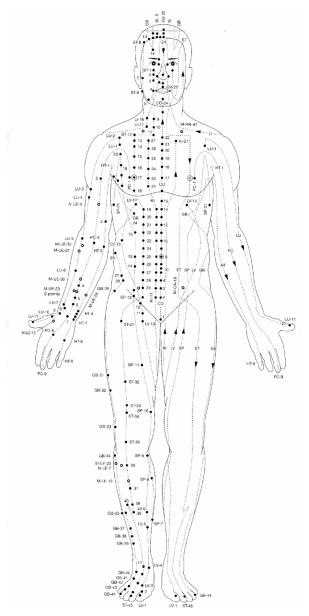


Figure 1: Sample Accupressure Diagram 8

It is important to note that Chinese medicine does not view the organs in the same way as Western medicine does. Though the terminology is similar, the underlying concepts are very different. The Chinese cannon does not refer to an actual anatomical reality, but uses abstract concepts to define closely related body functions. Points on the large intestine meridian, for example, can be used to treat problems as diverse arthritis, dry mouth, shoulder pain, constipation. The Eastern organ meridian concept is based on thousands of years of observations of the external body, and not surgical exploration of the internal body. In Eastern medicine there are five to six yin organs: heart, spleen, lung, kidney, pericardium, and liver. There are also six yang organs: large intestine, stomach, small intestine, bladder, triple warmer, and gall bladder. The yin and yang organ meridians are paired and generally represent similar bodily functions.

So far, two methods of employing the Eastern meridian/pressure point system, acupuncture and acupressure, have been discussed, but there are many other effective ways of applying this knowledge. Many Eastern healing methods make use of the concept of acting to "unblock the flow of qi" in order to promote health and happiness.

Jin Shin, for example, is a style which originated in Japan and involves a practitioner applying steady finger pressure on specific points for a minute or more. If done correctly, Jin Shin often induces a distinct feeling of well being and warmth in the person receiving the treatment. Due to the duration of contact, the practitioner can often feel the change in

the quality of the energy passing through the points. It may feel similar to a small electrical pulse.

Another Japanese art, Shiatsu, which literally means finger (shi) pressure (atsu), involves rhythmically applying pressure with the thumbs to specified points for three to five seconds. The goal of shiatsu is to simulate the body's natural curative powers through stimulation of points on the meridian system thereby releasing excess lactic acid and carbon dioxide. The Zen Shiatsu practitioner uses a rhythmic pressure applied by varied hand positions. The point of the elbow or the knuckles will create acute pressure. The palm of the hand has a broad target area, and is often less intense for the recipient.

Tui Na, which means "push-grasp", originated in China some 2,000 years ago. It is a vigorous yet subtle style of massage of the soft tissue, specifically the muscles and tendons. Rapid hand movements over the body help improve the circulation and the movement of qi.

Thai Massage has been practiced for over 1,000 years. It combines elements Japanese Zen Shiatsu with Indian yogic stretches and Ayurvedic massage.

#### Pressure Points and Combat

All these treatments are excellent for healing injuries and maintaining the strength of the martial arts practitioner, but knowledge of qi flow, meridians and pressure points can be used offensively as well. Fighting arts with an emphasis on pressure point attacks such as "death touch," known in Chinese as *Dim Mok*, in Korean as *Kuepso Chirigi*, and in Japanese

as *Atemi*, are believed to have evolved simultaneous to the healing arts. Because of the highly dangerous and mystical quality of these skills, the techniques were jealously guarded. It was only in the late twentieth century that Westerners were able to understand and utilize these systems for attacking the body. Although it may seem unlikely that even an exceptionally well-placed strike could instantly kill an opponent, the effectiveness of such a strike cannot be disputed.

Results can range from involuntary muscle responses and partial loss of motor functions (from damage to nerves serving muscles), to loss of conscious (for reasons which remain unclear, but hint at neural involvement).<sup>9</sup>

Due to differences in body type and training, not all pressure point attacks will have the desired effect. Some people with naturally decreased sensitivity are seemingly unaffected by this sort of attack; other martial artists endure painful training procedures to deaden the susceptible nerves and pressure point regions. Boxers and kick-boxers are known to employ the latter strategy. People who are under the influence of powerful drugs or otherwise intoxicated may also be immune to some pressure point attacks. In a person with a taut, muscular body, the tsubo is pushed close to the surface, or close to the bone, and is therefore more easily triggered. Consequently, very muscular individuals are generally more susceptible to pressure point attacks than people with a high body fat content.

Assuming that you are not applying a "death touch" attack, a pressure point attack can actually be a less injurious form of defense:

By manipulating a body's weak points, it becomes possible to immobilize or restrain an attacker without causing serious or permanent injury.<sup>10</sup>

Using this form of attack you can stun the body rather than seriously damage it. Another added benefit is that attacks on some points, like *Stomach 3*, which will be discussed later, inflict significant pain, but leave no permanent marks. Pressure point attacks can be just as effective when executed by smaller people and can be a tremendous advantage in defense against a much larger attacker. Since the sensations are so intensely focused, and the point is often located just beneath the body's surface, it does not require much strength to make a big impression. The pain generated by a precise attack is generally of the shooting or radiating variety, and will often affect more than one part of the body. The sensation is immediate and difficult to withstand.

#### Striking

There are several ways in which one might use pressure point knowledge during a fight. Because of the need for extreme accuracy, trying to hit a pressure point with a strike can be very difficult. There are a few points, which because of their convenient position and their standard degree of sensitivity, make excellent kicking and punching targets. These targets tend to be located on the lateral aspect, or perimeter, of the body.

Gallbladder 31 or "Wind Market" is a spot located on the outer thigh, midway between the hip and the knee (see Figure 2). A well placed roundhouse or side kick to this point can cause instant and severe cramping in the leg. *Large Intestine 14* or "Outer Arm Bone" is a point that is located right below the insertion point of the deltoid muscle in the upper arm. A blow to this region can cause numbness, pain, or temporary loss of function in the arm. At the very least it will slow down future punches coming from that side!



Figure 2: Side Kick to *Gall Bladder 31.*<sup>11</sup>

Under the arm, in the center of the armpit is a very potent pressure point called "Extreme Spring" or *Heart 1* (see Figure 3 and also Figure 6). It can be reached with a high side kick or front kick—assuming that the opponent's arm has been raised and is away from the body. *Stomach 6* or "Jaw Chariot" could also be called "K.O. Button," because a strong blow to the corner of the jaw where this point is located can cause the opponent to lose consciousness. There are many other pressure points located in the head that can be

used to knock out an opponent. Unfortunately, as with all pressure point strikes, knockout strikes are very difficult to render effectively.



Figure 3: Side Kick to *Heart 1*.

#### Wrestling

Use of pressure point fighting in ground work, or *newaza*, is generally easier to perform than in a striking scenario. You are much closer to the target and therefore can attack the area with greater precision. You can also control the strength, depth and duration of the application. There are more pressure point target areas open to you during ground fighting as well. This form of attack is often used as a defensive maneuver in ground fighting, but it can also be wonderfully effective as an offensive strategy. Pressure point attacks can cause an opponent to release their hold momentarily, and thereby provide

you the freedom to quickly move into a more advantageous position.





Figure 4: Thumb to *Gall Bladder 57* (left). Figure 5: Heel Thrust to *Spleen 10* (right).

There are three pressure points on the lower body which are very vulnerable to attack during ground fighting. Gall Bladder 57 or "Mountain Support" is at the bottom of the calf muscle bulge on the back of the leg. This tsubo is located along the sural nerve and is thought to be more sensitive in people who drink coffee. If one is pinned in a "four corner" position, it is possibly to disrupt the attack by digging your heel into this point on the attacker's leg. Spleen 10 or "Sea of Blood" is a point located on the lower inner thigh at the bulge of the vastus medialis muscle (see Figure 5). This point is most commonly attacked as a means to "pass the guard". A successful attack here causes considerable pain in most people, and a subsequent release of the leg lock that otherwise maintains the guard.

*Spleen 13* or "Rushing Door", is a powerful target located a finger width above the inguinal crease. Continued pressure to the point can seriously disrupt the flow of blood through the body. It is often very

sensitive, especially in males. This is an excellent point to attack if you are being pinned in a "full mount" or similar hold. When correctly applied, the attack causes the recipient to rapidly pull their hips away, thus enabling a defensive turnover. "Extreme Spring" or *Heart 1*, located in the previous section on strikes on page 208, is another great spot to attack when you are trapped beneath your opponent. As demonstrated in Figure 6 below, a good strike there might cause the attacker to squirm away and release a mount, choke or hold, permitting escape.



Figure 6: Applying pressure to *Heart 1*.

## **Throwing**

There are two significant pressure points on the face that can be helpful in achieving kuzushi or off balancing for backward throws. Stomach 3, or "Facial Beauty", is located two finger widths from the side of the nose towards the ear, and directly below the cheekbone (see Figure 7). The most effective application is to pinch the two points on either side of the nose with the index and middle finger, and then drive the head of the opponent backwards. This breaks their balance and leaves them very susceptible to a reap. Another point nearby is Governing Vessel 26, or "Water Trough," which is located just beneath the nose. Applying a driving pressure to this point will have an immediate off balancing effect on most people. A palm heel strike to this tsubo will cause grievous harm to the recipient if bone fragments are driven up and into the braincase.



Figure 7: Single thumb pinch against *Stomach 3*.

#### **Joint Locks**

Pressure points can be used very effectively in a joint lock scenario. The hands are full of pain inducing points, not the least of which are the bases of the fingernails. Applying acute pressure to these areas causes searing pain, and will generally cause all but the most stubborn attackers to loosen their grip.





Figure 8: Thumb to *Small Intestine 4* (left). Figure 9: Thumb to *Large Intestine 1* (right).

In the webbing between the thumb and pointer finger lies one of the most well known and effective pressure points. It is known as *Small Intestine 4* or "Hoku." Lightly pressed it is said to relieve pain, particularly toothache, but pressed with serious intent it can cause a sharp pain that radiates throughout the hand. To bend an opponent's elbow, consider attacking *Large Intestine 1* or "Crooked Pond". This point is located on the top side of the elbow crease. A swift blow or a digging thumb will generally cause an attacker to retract the elbow towards the body. The wrist and forearm also have numerous points of pain that can be exploited in various wrist lock techniques.

## **Learning To Find Points**

How does one find pressure points? Although you

can try to find and trigger many of the points on your own body, the best way of learning is to find a partner willing to endure a little pain and prodding. An acupressure chart or diagram showing the primary points on the body will help, as those five thousand years of prior research will give you a head start in figuring out where to find hot spots. The Chinese have a system of locating points using bodily landmarks and a system of measurement based on finger widths. These measurements are called *cun*. For example Facial Beauty (*Stomach 3*), shown in Figure 7, is typically described as being 2 cun from the base of the nose, towards the ear, beneath the ridge of the cheekbone.

Acupressure points are generally found in joints, the splits between muscles and in the small grooves found in some bones. The surface area of the point can vary from the size of a small pebble to the size of a quarter. It is clearly more viable to use the larger pressure points as targets. The best way to find out whether or not you've hit upon an especially painful spot is to judge the reaction of your partner. If their eyes flash and they quickly retract whatever part of their body your working on, you've found it! It is then wise to experiment and try to learn what exertion is required to achieve a desired effect.

If your intention is to heal, firm pressure may further block the qi flowing through the tsubo and be counterproductive. A light but constant pressure will generally work best at relieving blocked qi. The effected pressure point area will often become warm and may pulse under your fingers. The sensation is similar to moving sand. If you intend to cause pain, you will often have to apply considerable pressure, and your partner will most likely not permit you to hold the point long enough for you to feel any surface changes. As it has been done for ages, the way of trial and error is the best method of learning how to locate pressure points.

# Simple Massage Techniques

It is a tenet of some schools of martial arts that if you know how to break your training partners, you should also know how to put them back together. Up to now, this paper has discussed many specific ways of using pressure points to inflict pain and deter an opponent. The following series of simple Zen Shiatsu techniques have been adapted from Michael Reed's text, *Shiatsu*. These can be used at the end of a training session to restore energy balance and ease the pain in your training partners.



Figure 10: Beginning the Massage (right).

To begin, have the partner sit cross-legged facing away from you as shown in Figure 10. Stand behind them with your knees lightly contacting their back. Take a good deep stance so that you can lean your weight in. Apply a firm and broad based pressure to their shoulders with the heels of your hands. Your arms should be straight and you should be using your body weight to press toward the center of their body. Rock gently from hand to hand, each time pressing into a slightly different area. To stretch out the shoulders place the hands on the far ends of both shoulders and press down on them evenly. Hold this pressure for ten seconds. Don't push down so hard that the person begins to fold beneath you.

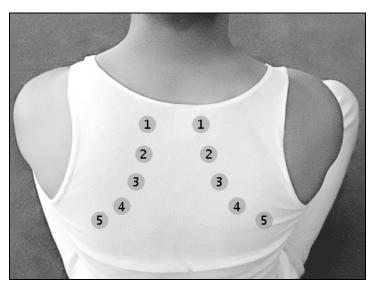


Figure 11: Shiatsu Massage Points (left).

It is very helpful to work key points—down the top of the back and over the shoulder blades as shown above in Figure 11. Use your thumbs to apply pressure sequentially to points one through five. Press firmly for five seconds at each point, working both sides of the back simultaneously from top to bottom. When you have applied pressure to all five points, work your way back up in reverse along the same path.

Next place the heels of your hands two finger widths from the base of the neck on the top of the shoulders. Press down towards the center of the body and hold at this spot for up to 30 seconds. This may be painful at first, but the pain should begin to abate as the point is held. Slowly knead the muscles on the top of the shoulders using a squeeze and pull rhythm.



Figure 12: Tui Na Tapping Massage (left).

A nice way to finish your massage session is to use some Tui Na techniques. A simple procedure is to clasp your hands loosely in a prayer position—as if you were holding an egg between them—and tap lightly and rapidly with the knife edge side of your hands against your partner's shoulders and back (see Figure 12). It is important that you do not use too consistent of a rhythm, as the body quickly adapts and becomes desensitized to the application of regular, rhythmic pressure. Instead, try to follow an irregular rhythm, perhaps by tapping to the melody of a song or nursery rhyme that you know. This brisk tapping will bring up the circulation and bring blood flow to the area. It also helps with the flow of qi in the region. Finish the session as depicted in Figure 13 with hands flat, "sweeping" quickly, smoothly and effortlessly from the base of the neck to the edge of the shoulders.

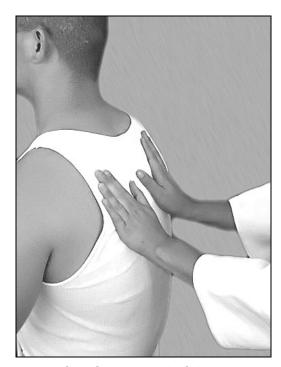


Figure 13: Ending the Massage (right)

#### Conclusion

By applying pressure to key points on the body, it is possible to stimulate the body's natural curative abilities, relieve muscular tension, and promote the release of endorphins. These beneficial results can be brought about in a number of ways, such as acupuncture, acupressure, Shiatsu, and other forms of massage. These treatments are based on a blend of the 2,000-year-old Chinese map of the body and modern science. Even people who lack extensive knowledge of points and meridians can use the basic concepts for simple healing practices. Applying this knowledge to martial arts combat, attacks on key pressure points have been demonstrated to be very effective self-defense. By attacking vulnerable spots along the perimeter of the body in a standing fight, you can potentially immobilize your opponent or at least slow their reaction time. By attacking certain points on the center line, or medial aspect of the body during a ground fight, one can cause an opponent to shift their weight suddenly and create an opening for escape. Pressure point attacks can also be applied in off balancing that is strategically helpful in executing judo style throws. There are many ways in which further investigation and practice of this ancient knowledge of qi, meridians, and pressure points can influence and expand you martial arts abilities. Finally, by sharing knowledge of the healing power of pressure point manipulation, you will contribute to the overall health of your fellow martial artists.

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#### **Endnotes**

- <sup>1</sup> Reed, Acupressure.
- <sup>2</sup> Wilkowski, p. 2.
- <sup>3</sup> Singer.
- Livingstone, subsection: "Acupuncture—Past, Present and Future"
- <sup>5</sup> Reed, Acupressure, p. 6
- Note that despite the long history of their use, neither the location and routing of the meridians, nor the placement and naming of the accompanying pressure points has been completely standardized.

## Pressure Points for Self-Defense and Healing

- Reed, *Acupressure*, p. 3
- <sup>8</sup> Tedeschi.
- <sup>9</sup> Tedeschi.
- <sup>10</sup> Tedeschi, p. 141
- All photos by Randy Vogel, © 2004. Many thanks to subjects Elaine C. Chao and Wei-Su Liou. High resolution color photographs of these two sequences (pressure points and massage) can be found at http://www.funfolks.net/UCMAP\_M6/Copenhaver.