

Japanese Acupuncture - Current Research

Changes in Vessel Puncturing in Japan

Nobuyuki Seki

Director, Japan Shiraku Gakkai

1. Introduction

It does not need to be particularly mentioned that bloodletting treatment has been performed since ancient times on the East and West of the ocean. In ancient China the meridian theory was integrated into this treatment form to establish the "bloodletting" (micropuncture) concept. This manuscript deals mainly with the currently reported situation in Japan and describes this treatment modality.

Since micropuncture is a treatment form where blood is taken, it may not always have been a part of the therapeutic scene, but records indicate, that it has been introduced into medicine from China. In this context micropuncture survives not as the phlebotomy performed as a folk treatment, but rather as the micropuncture treatment form that has been integrated into the medical care based on the meridian theory. The "I Shitsurei" of the "Taiho Ritsurei", imitating the regulatory system of the Tang dynasty, stipulates this treatment form as one of the techniques called "Hanbaku no Ho" anma massage students are supposed to study and the 10-volume commentary "Ryo no Gige" contains the passage: "Use needles to judge presence of blood stagnation in the region of injuries, and treat based on this judgment". This may be considered to correspond to the "Byoshiho" called collateral puncturing method, that was mentioned in the Ling Shu¹⁾.

Later too references to vessel puncturing are found in various texts. There is not enough space here to discuss all of them, but I would like to expound a little on the form of vessel puncturing of the Edo period, that has influenced the currently practiced form in Japan most profoundly.

2. Vessel puncturing during the Edo period

Briefly stated was the vessel puncturing practiced

during the Edo period eclecticism between the Chinese collateral puncturing method and the Dutch form of phlebotomy. Specifically the method consisted of tightening the cubital or popliteal veins, which are then punctured with a triangular-bladed needle, letting the blood flow for some time before the constriction is loosened and the bleeding stopped during this form of venous puncturing.

A number of Chinese texts like the "Sachu Gyokuhou" written by Kaku Shitsui during the 14th year of the Kangxi period during the Qing dynasty (1675) triggered the flourishing of vessel puncturing during the Edo period. Among the books imported to Japan this one became a very high ranking bestseller and since it was brought to Japan by ship in 1681, I believe it was reprinted at least four times. Sabyou²⁾ refers to seasonal diseases occurring from summer through autumn and is a common designation for acute diseases. The conditions are characterized by abdominal pain, vomiting, diarrhea, irritation and skin eruptions and may include a variety of diseases varying from heat stroke to small pox. This specialized book introduces the reader to the performance of vessel puncturing followed by the administration of Kampo medicine. By the way, the book "Sachu Gyokuhou" was written under the influence of western medicine (traditional medicine influenced by Hippocrates or Junani. About 80 years later Tomon Yamawaki (1736-1782), who worked together with Yoshio Kōgyū (1724-1800) as an interpreter in Nagasaki, studied the Dutch style of bloodletting therapy brought from the Netherlands and Gengai Ogino (1737-1806) wrote the book "Shiraku Hen" (Volume on Puncturing). By arranging a compromise between theory and technical skills of both the vessel puncturing and the Dutch bloodletting therapies, this form of vessel puncturing reached the zenith of its prosperity from the middle to the latter Edo period. Accidentally, the term "vessel puncturing" (Shiraku) is not found in texts preceding the Qing dynasty, but rather called the other way round "Rakushi" = collateral puncturing. The oldest reference to traditional medical bloodletting therapy that had been

called vessel puncturing is found in the "Sugiyama Shinden Ryu", but it remains obscure, since when this developed into an established nominal expression for this treatment form³⁾.

Later Kinkei Nakagami (1744-1833), Tousaku Sanwa (?-1818), Shingen Kakimoto (both birth and death dates are unknown), Shukei Sukanuma (according to one theory: (1706-1764), Sotetsu Ishizaka (1770-1841) and similar excellent physicians appeared and developed such diverse techniques as puncturing the network vessels, three-edged needles with a tip in the shape of Chinese chive leaves, inserting the three-edged needle into tubes for the puncturing etc. and thus laid the foundation for original Japanese vessel puncturing methods⁴⁾.

Among these and compared to other practitioners, who used decoctions + vessel puncturing or else acupuncture & moxibustion + vessel puncturing, Tousaku Sanwa employed vessel puncturing for almost all conceivable diseases and has been regarded as the greatest vessel puncturist of the Edo period. The written records called "Shiraku Bunken Roku" by his disciple Rokuri Itou (Daijo) detail the amount of blood drawn and the clinical course following the treatment and thus are still today an extremely illuminating reference.

3. Vessel puncturing in modern times

In conjunction with the fall of the Edo shogunate the Meiji government promoted a rapid westernization both in order to maintain Japan's independence and out of necessity to establish a system enabling Japan to sustain the national militarization. The medical field was no exception and later not only vessel puncturing but traditional medicine as a whole declined.

According to a proclamation published by the Cabinet in 1883 and implementation of regulations related to the licensing of physicians the western medical system gradually gained in influence and in 1895 the Imperial Government rejected a proposed continuance of Kampo, which led to a stagnation of traditional medicine that continued for a century.

Moreover, a lot of personnel in the prime of their working life was drafted into the army and the consensus is, that by the end of World War II skills and schools of the Edo period had discontinued.

4. Situation of vessel puncturing in modern times

Regarding the revival of vessel puncturing after the war today mainly two groups can be distinguished in Japan, that are involved in the promotion of vessel puncturing, including conduction of activities related to education and the propagation of this treatment form. Each of which was initiated by army physicians. The physician Tetsuo Asami established the group practicing the "well point puncturing method" he had proposed, while the two physicians Kunimasa Kudo and Masaaki Maruyama were the central figures at the base of the academic tradition of the Japan Shiraku Gakkai group.

1) Tetsuo Asami's "well point puncturing method"

The "well point puncturing method" of Dr. Asami was brought to life by the year 1970, at which time he, who already practiced Ryodoraku therapy (electroacupuncture), obtained hints from books about oriental medicine regarding vessel puncturing at the well points for the treatment of shoulder stiffness and thus reportedly later perfected his "well point puncturing method" as a form autonomous nervous regulation⁵⁾. After a period of 25 years, based on the Anpo / Fukuda theory that emerged from 1995 onwards, this technique has become widely and well known. Yet, those two treatment forms did not fuse into one, but rather the establishment of one group implementing the Anpo / Fukuda theory based on the so-called "ANS Immune therapy" and another group around Dr. Asami that called its technique the "well point, scalp vessel puncturing". Many of the members of these groups are physicians, using injection needles as the tool for blood sampling, but recently laser acupuncture, which does not draw blood, is also being used.

The Anpo / Fukuda theory explains the mechanism of action of the vessel puncturing in terms of

autonomous nervous regulatory effects. This treatment form employs stimulation of the nerves corresponding to those that are at that point predominantly active to restore balance in case of various conditions caused by a predominant activity either the sympathetic or parasympathetic nerves. Formerly glycyrrhizin preparations were used to stimulate parasympathetic nerves, but puncturing the well points is as a method far simpler and reportedly has immediate effects.

Concretely, the sympathetic nerves innervate each finger, but the actions of the parasympathetic nerve are determined, so that for the stimulation of the parasympathetic nerves the well points of the thumb, index, middle and small finger as well as Hyakue (GV20, Baihui) are punctured. This induces a reduction in granulocytes coupled with an increase in lymphocytes and thus corrects the leukocyte balance.

The ring finger may stimulate the sympathetic nerves and therefore has in the past not been used except in cases of pediatric asthma and the like, but recently it too has come into use.

Moreover, removal of the factors responsible for the sympathetic hyperactivity is important for the treatment of diseases as well as measures to increase the number of lymphocytes. Vessel puncturing has been considered to be an assistive treatment for that purpose and this line of thought has already been mentioned in the Yellow Emperor's Classic of Internal Medicine. In other words, while the mechanisms of action of the Anpo / Fukuda theory have not yet been completely clarified in terms of modern medicine, the ability to provide explanations for the effects of vessel puncturing makes this new western medical interpretation highly interesting.

2) Vessel puncturing concepts of the physicians Kudo and Maruyama

On the other hand, the physicians Kudo and Maruyama have a strong connection to traditional medicine. The improvement of the poor health of Kudo's father achieved by treatment administered by Mori Dohaku practicing the Ikkando style motivated

the former to choose the path of a doctor. At that time he separated himself from the Ikkando school and independently opened his own Onchido practice, becoming a disciple of the famous Showa period Kampo physician Domei Yakazu. Before he joined the army as an army doctor he used vessel puncturing to treat sprains etc. and thus learned about the extreme effectiveness of this treatment form. Later, on various fronts in Saigon, Hanoi, Laos etc. during his military service too he treated his patients mainly with acupuncture & moxibustion as well as by vessel puncturing and found through experience, that well point puncturing seemed to be the most effective treatment for malaria.

Maruyama himself had a weak constitution by nature, but recovered completely through the moxibustion treatment he received from Ken Sawada. This motivated him to devote himself to the pursuit of acupuncture & moxibustion and after the death of Sawada he studied under his foremost disciple Ikkaku Shiro and thus devoted his life not only to vessel puncturing, but also to the study of the "Yellow Emperor's Classic of Internal Medicine" and the meridians. Consequently, both their patients predominantly with acupuncture & moxibustion as well as vessel puncturing and although both were physicians, many members of these groups are acupuncturists, using the three-edged needle (feng zhen) as a tool for the bloodletting.

The two met each other on the inaugural meeting of the Japan Society for Oriental Medicine, found each other to be like-minded and coauthored and published in 1957 the book "Vessel Puncturing Therapy". This drew close attention to and reintroduced the knowledge about vessel puncturing after a century of oblivion^{6,7)}. Disciples of both physicians with an interest in vessel puncturing gathered and thus the theory adopted by the Japan Society for Oriental Medicine founded in 1990 represents a tradition of the concepts of Kudo and Maruyama and is classified as follows.

Vessel puncturing is classified according to sites and indications into well point puncturing, skin

puncturing and collateral puncturing. Each of these methods promotes the flow of qi and Blood through the meridians by drawing a little amount of blood, thereby alleviating symptoms and attempting to heal diseases.

Well point puncturing is a method where the well points of hands and feet are cut with a three-edged needle to draw blood in order to promote the flow of qi and Blood through the meridians through the respective connections of the individual meridians or else the sites of each meridian, where their qi originates. Rephrased in western medical terms this refers to an improvement of the circulation in the region of arteriovenous anastomoses, in which circulatory disturbances are likely to occur, thus attempting to modify the microcirculation throughout the entire body. [Picture 1]

The respective indications correspond to the indications for the individual well points, like for example "Shoho (LU11, Shaoshang) for the treatment of pharyngitis", but in special cases like paroxysmal hypertension, in case of common cold for the purpose of deferverence or the treatment of shaking chills, asthma, acute cerebral infarction or its sequelae and the like blood may be drawn from the well points of all ten fingers.

Skin puncturing is used for anomalies of the skin or muscles and if no network vessels are found in the vicinity, tenderness, induration, skin changes (darkening, dark red coloration, red macular spots and the like), tension, itching, swelling, reddening, feeling of warmth, blisters etc. may also serve as landmarks, at which the skin (or mucosa) is then punctured with a three-edged needle at several points to draw some blood, or suction cups too are often used to obtain blood. The auriculae, nose and tip of the tongue and the like are special sites. Skin puncturing has the effect of modifying microcirculation dynamics by puncturing specific acupoints or other sites and thus can be used anywhere on the body. This is what distinguishes it mostly from western phlebotomy. [Picture 2] Efficacy too conforms to the effects of the individual acupoints.

The microvessel puncturing I am going to introduce here in last place is an original Japanese technique

that should be promoted throughout the world. This technique employs puncturing superficial microscopic veins in the skin with a three-edged needle to draw blood. Sankei Nakagami dealt in his book "Seiseido Itan" with these microvessels, but the technique has subsequently been refined based on studies by Kudo and Maruyama. The expression microvessel is the only anatomic term used in the "Zhenjiu juying fahui (Shinkyu Shuei)" and does not appear in the Chinese classics. Actually, Chinese practitioners practically do not target these microvessels at all. [Picture 3]

Considering the state of eruption shown in the picture as a form of bypass the body sets up in the most superficial layers of the skin to compensate for a deteriorating blood circulation through the microvessels and thus ensure the circulation is probably easily comprehensible. In the venous plexi on the face or in the vicinity of lesions on the body surface these microvessels tend to be easily found. For that reason using this technique even a minimal puncturing of the site in question can result in a dramatic change in hemodynamics and through the appropriate use of suction cups the risk of infection can be lowered.

5. Conclusions

Above I described the history of vessel puncturing in Japan and outlined the techniques currently taught in the relevant courses. Since the foundation of the Japan Shiraku Gakkai in 1996 the "Vessel Puncturing Manual" has been used as teaching material during these courses, but the contents was soon revised and recently the "New Edition: Vessel Puncturing Manual" has been published. I am convinced, that reading this material too will certainly contribute to a deepened understanding of the matter.

Regarding the current situation of the medical system there are no guarantees, that will be a continuous supply of expensive medications and that blackouts do not render highly sophisticated equipment into oversized trash. In this situation vessel puncturing represents a simple method of immediate effects.

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