

ACUPUNCTURE — AN ANCIENT CHINESE ART OF HEALING

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At a ward round in a unit of the General Hospital, Singapore, a patient was seen with small marks on the front of his right knee and his back (see Figs. 1 & 2). These are not often recognised as acupuncture marks. A brief study is now made for the purpose of enabling the reader to be acquainted with the procedures commonly practised by the Chinese acupuncturists in Singapore.



Fig. 1.

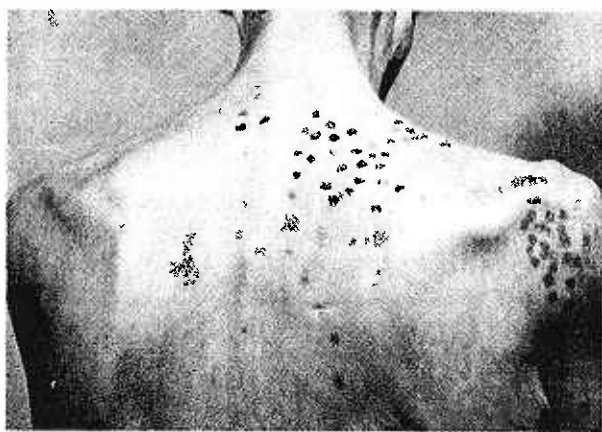


Fig. 2.

HISTORY

The word 'acupuncture' is derived from the Latin 'acus' (a needle or pin) and 'punctura' (puncture). The earliest origin of the practice

is shrouded in folklore and legend. The earliest book extant on acupuncture is the *Huang Ti Nei Ching Ling Shu* (The Yellow Emperor's Manual of Internal Medicine: the Ingenious and Fundamental Work on Medical Physiology and Anatomy)*, compiled by some unknown writers probably about the 1st century B.C. and later edited by Wang Ping in 762 A.D. Its chapter on acupuncture appears in the form of a dialogue between the emperor Huang Ti and his Physician Royal Ch'i Pê. No modern scholar ever takes the actual occurrence of this supposed dialogue too seriously, but many writers of the past have been misled directly or indirectly into ascribing the origin of acupuncture to the legendary period of Huang Ti in the 3rd millennium B.C.†. The mention of the acupuncture needle is found in an even earlier text in the *Shan Hai Ching* (Classic of the Mountains and Rivers) which describes a jade-like stone that could be made into acupuncture needles. In fact the great 16th century pharmacopist Li Shih-chên also referred to this and said that in ancient time acupuncture needles were first made of stones and later of metal. We do not know the exact date when the *Shan Hai Ching* was written, neither do we know the names of its authors. However, it is definitely known that the book was written some time between the 5th and the 2nd centuries B.C. This has led to the belief that the art of acupuncture was practised in China during the time of the Warring States (between 480 B.C. and 221 B.C.)‡.

Several acupuncturists of fame flourished during the Han periods. During the time of the Three Kingdoms (221 A.D. to 265 A.D.) Ts'ao Ts'ao was said to be cured of his headache by the acupuncturist Hua Yuan-hua. In the Chin Dynasty (265 A.D. to 419 A.D.) an important text on the subject of acupuncture, entitled the *Chên Chiu Chia I Ching* (The Fundamental Classic on Acupuncture) was written by Huang-fu I. Since then a number of writers had emerged. Among them we may mention the celebrated 7th-century alchemist and herbalist Sun Ssu-mo, who did not disdain to devote the last section of his *Ch'ien Chin Fang* (A Thousand Golden Remedies) to this subject.

*For a French translation of this work see Chamfrault, A. & Ung Kang-Sam (1954 and 1957). For an English translation see Veith I. (1949) The Williams & Wilkins Co., Baltimore.

†For a typical example of this see Morse (1934).

‡See for example Ch'êng Tan-wan (1952).

In the 10th-century A.D. Wang Wei-tê constructed a life-size bronze figure (t'ung jên) under the order of the Sung emperor Jên Tsung. The interior of this figure was fitted with models of the organs and viscera, and these were surrounded with water. On the exterior, holes were made to represent needling points set forth according to Sun Ssu-mo's description. A facsimile of this figure is preserved in Peking**. To describe the model he made Wang also wrote the *TUNG JEN SHU HSUEH CHEN CHIU T'U CHING* (Diagrammatic illustrations of the Acupuncture Points on the Bronze Figure). Other Sung writers of note on acupuncture were Wang Chih-chung and Liu Pao-yuan.

According to Chou Pê-ch'in (1934) the golden age of acupuncture in China occurred during the time of the Mongols and the Ming Dynasty, i.e. from about the middle of the 13th-century A.D. to about the middle of the 17th-century A.D. Many important treatises on acupuncture were written during this period. Of special interest is the *Shih Ssu Ching Fa Hui* (Elucidation of the Fourteen Meridians) by Huo Pê-jên in the year 1341 A.D. This book found its way to Japan and remained apparently lost to the Chinese until a few hundred years later when it returned to China after the Japanese had written a commentary. It is not necessary to give a full list of all the literature on acupuncture produced during this time, but we may mention here the *Chên Chiu Ta Chêng* (A Compendium on Acupuncture and Cautery) written by Yang Chi-Chou in the year 1468, in which an attempt was made by the author to incorporate all existing knowledge on that subject.

In the year 562 A.D., the 23rd year of the Japanese emperor Kimmei Tenno, acupuncture as a system of therapeutics was carried to Japan by a Chinese traveller. Later, by an imperial edict an acupuncturist was appointed to serve in the imperial household together with the Physician Royal. The Japanese themselves have written many important texts on the subject of acupuncture and cautery, for example the *I Shin Ho* (Secret Medical Remedies) of Yasuyori Tanba and the *Shinkyu Syuyo* (Essentials of Acupuncture and Cautery) of Dozo Manase. About the middle of the last century the art of acupuncture declined due to the impact of western medicine. But this was not to last long. At the very beginning of this century

a number of western-trained physicians applied modern methods to the study of acupuncture. Many of them were M.D.'s with much experience in modern medical research. Among them may be mentioned Miura and Okubo, to both of whom owed the revival of acupuncture in Japan. To indicate how acupuncture flourishes in Japan in modern time it suffices to mention that there are at least 17 different schools or streams of thought each propounding its own acupuncture technique in Japan.

Acupuncture was first introduced to Europe by a Dutch surgeon in the employment of the Dutch East Indies Company, named Wilhelm ten Rhyne who wrote a book entitled *Dissertatio de Arthritide*, published in London in 1683. Then in the year 1712 another fellow-countryman of his named Engelbert Kämpfer, who was then working in the Dutch Embassy in Japan, published a tractate in Germany on the same subject entitled *Amoenitatum Exoticarum*. Both these books received very little attention. Over half a century later the art of acupuncture was again referred to in Dujardin's *Histoire de la Chirurgie* (published in Paris in 1774) and Vicq-d'Azyr's *Encyclopédie Méthodique* (published in Paris in 1787). However, none of them could arouse sufficient interest for the art to be practised in Europe. It was not until the year 1810 that the first case of acupuncture was performed in Europe when the French physician Louis Berlioz treated a neurotic patient using this Chinese method. He published his result in 1816††, but it fell on cold shoulders. A few years later the method was again tried by Haime and then by Bretonneau. Since then more and more experiments on acupuncture were conducted, for example by Lacroix, Recamier, Martinet, Morand, Meyranx and Demours in France and Churchill and Scott in England. Among the many publications the most outstanding at that time is perhaps Professor J. Cloquet's *Traité de l'acupuncture*, published in Paris by Dantu in 1826.‡‡ Acupuncture became very fashionable in France, and at one time it was used as a form of miraculous cure for all ailments. Today, there are two societies for acupuncture and a special journal is devoted to it. It also has been used by Sir James Cantlie for sprains and chronic arthritis. He reported favourably on the results. In recent years acupuncture attracted the attention of Soviet doctors and in 1956 the

**See Wong & Wu (1936).

††Cf. Berlioz, L.V.. *Mémoires sur les Maladies Chroniques, les Evacuations Sanguines et l'acupuncture*, Paris.. 1816.

‡‡According to Dechambre (1864).

U.S.S.R. sent several doctors for study in China. In 1959 the translation of a handbook entitled *New Acupuncture* by Chu Lien was published in Moscow. The number of publications on acupuncture in French, Italian, German, English and Russian has accumulated considerably, for example 351 of them have been listed by T'ao & Ma (1956).

SOME DEVELOPMENTS

There has been very little modification of the original ideas and practices since acupuncture first started. Such change as there was, consisted mainly in the change from a septic to an aseptic technique. Traditionally, nothing was done to sterilize the acupuncture needles. However, in the practice of a local exponent as witnessed by the writer, the thin needles were cleaned with methylated spirit after being boiled and placed in a small box lined with velvet like a jewel case (see Fig. 3). Before the needling he cleaned the site with cotton wool soaked in spirit, much like a nurse performing an injection, and the inserted needle.

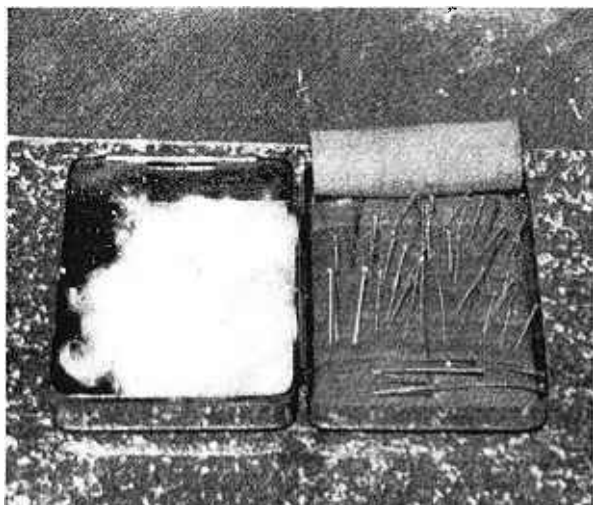


Fig. 3.

The size of the needles has also changed. Formerly they were coarse and large but those used now are thin and about the size of hypodermic needles.

There was also the introduction of an electric charge with acupuncture. Electropuncture or galvanopuncture was first suggested by the Frenchman Louis Berlioz in the year 1810. It has been described for instance, by A. Trouseau & M. Pidou (1855). Recently, in Communist China, Electroacupuncture as a means of producing anaesthesia has been used in tooth extraction and other maxillo-facial operations (see Chinese Medical Journal 1960 vol. 80:2 p. 97).

METHODS IN SINGAPORE

According to the famous Japanese Sugiyama school there are over ninety different ways of introducing a needle into the body. Only two methods which appear to be commonly used in Singapore will be described. One is a coarser method practised by the less expert and the other a more skilled method used by some modern acupuncturists.

a) **COARSE METHOD** The operator does not clean the site of puncture at all. He employs thick needles and pricks the site a few times initially, puncturing only the epidermis. He then daubs the puncture points with black Chinese ink mixed with vinegar and then repeats the puncturing process. The needles are not left in the skin. When the puncture wounds heal, tattoo marks are left (see Fig. 4).



Fig. 4.

b) **SKILLED METHOD** The acupuncturist cleans the skin carefully with methylated spirit. He locates the needling points accurately with the help of his long thumb nails before insertion. The way he inserts the needles will depend upon the case. Generally, in a chronic disease, the needle is 'screwed' slowly into the selected point. Direct insertion is only employed to stop severe pain like a toothache. The depth also

varies with the type of case. Needles are left in the skin usually for about 30 minutes and about 1-3 hours for chronic cases. On withdrawal of the needle, the little oozing blood is wiped off with a piece of cotton wool. Hardly any marks are left on healing.

THE NEEDLING POINTS

These points vary in number according to the different authorities from about 300-600 (see Figs. 5a & 5b). For example *Shih Ssu Ching Fa Hui* of Huo Pê-jên in 1341 mentions 660 points, while the Japanese *I Shin Ho* describes also 660 points, 52 of which lie in the mid-body line and 304 to both sides of this line. A number of these points, for example the point at the navel, are 'forbidden points' for the acupuncturist. One local practitioner considers 180 points to be sufficient for all the major illnesses.

There are specific points selected for the treatment of different diseases as diagnosed by the acupuncturists.

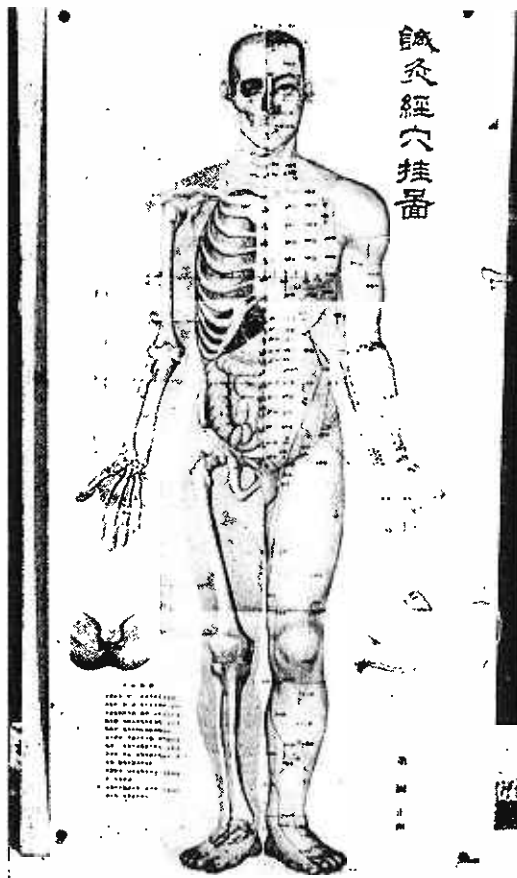


Fig. 5a.

SOME CASE EXAMPLES SEEN:—

Case 1. A schoolboy aged 15 years and educated in an English Secondary School in Singapore, had just sat for his School Certificate Examination. He was said to be suffering from

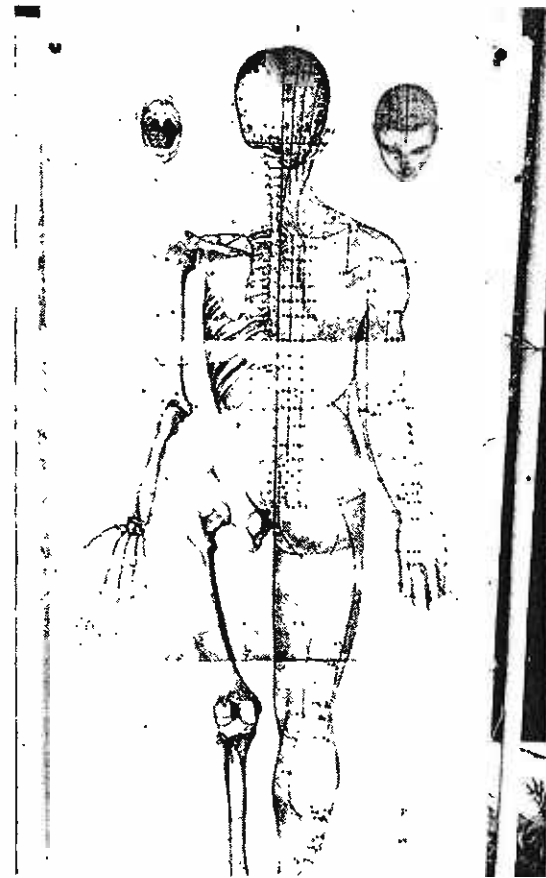


Fig. 5b.

Asthma since childhood. In spite of being treated many times at the School Clinic and by general practitioners he showed no improvement. Because of renewed episodes his mother brought him to an acupuncturist.

The points used were:

1. The Anatomical snuff-box,
2. The Ante-cubital fossa,
3. The Interclavicular space, and
4. The Inter-scapular space.

The needles were inserted directly without any screwing motion and left for a few seconds before being withdrawn.

Case 2. An old man aged 40 years said that he had suffered from pain in the right side of his face for the past 5 years. For one month before seeking the acupuncturist's aid he was getting worse. In this case, several needles were pinned around the right ear and his right face and left for about 1-2 hours per day. He was to have daily needling for about one week.

THE NEEDLES

In the beginning needles were made of stone, later of wood and bamboo and then of copper.

Stainless steel, silver and bronze needles were introduced much later. Traditionally, there are 9 types of needles, as described in all early primary sources (see Fig. 6). Not all these 9 types of 'needles' are in use currently. Those commonly used are about 2-2½ inches long. The handles are spirally shaped and the shafts the size of hypodermic needles in thickness. Different sizes are available.

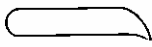
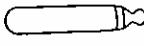
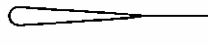
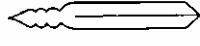

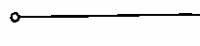



Name	Shape	Length
ch'an chên (chisel needle)		1.6"
yuan chên (round needle)		1.6"
ti chên (arrow-barb needle)		3.5"
fêng chên (spear-head needle)		1.6"
pí chên (sword needle)		4.0"
yuan li chên (round sharp needle)		1.6"
hao chên (small needle)		1.6"
ch'ng chên (long needle)		7.0"
ta chên (large needle)		4.0"

Fig. 6. The Nine Types of Acupuncture Needles (after Sakamoto)

SOME THEORIES OF ACUPUNCTURE

Only two will briefly be mentioned.

1. The first is influenced by the Chinese theory of Cosmogony which premises that all nature possesses the two vital intangible essences, the YING which is creative and the YANG which is destructive. Man as part of nature is also subject to these two influences. These essences exactly counterbalance each other in nature. Theoretically, they are qualitatively and quantitatively of equal amounts but are in a continual state of ebb and flow. They create successive changes of energy.

There is harmony and health in the human body, if the state of flow is continuous and uninterrupted and there is no obstruction of the essences in any of its parts. On the other hand, if there is an interruption of the essences, there is disharmony and disease.

According to the doctrine of YING and YANG, there are twelve 'channels' of transportation of these essences. The points where the needle is to be applied are all situated along these 'channels'. The needle allows the over-balanced and harmful humours to escape and removes the excesses, draws away morbid

juices and relieves stagnation of vital principles. Fresh vital essences are introduced, free flow is restored and health ensues.

Anatomically these points do not exist, neither do the so-called 'channels'. According to Marcel Lavergne (1934), the Chinese had noticed for a very long time that when the function of a certain organ in the body was disturbed, a certain 'spot' on the body surface would turn more sensitive to pain than normally when pressed lightly by a finger. The size of this 'spot' would be of the order of about 2 mm. diameter. To each organ of the body there were corresponding 'spots' or 'spot'. He calls the lines joining these 'spots' the meridians. These 'spots' are the needling points and the meridians the 'channels'.

2. Okamoto says that a metallic needle, when introduced into the body tissue, produces a negative electric charge which flows towards the direction of the needle. This explanation does not satisfy even the Japanese acupuncturists who point out that the art was also quite effective in the earlier days when non-metallic needles of stone, wood and bamboo were used. The most widely-accepted theory is perhaps that due to Okubo, who suggested that acupuncture was a form of mechanical stimulus. By means of acupuncture, he explained, an impulse was imparted to the nerve or muscle, and in this way the function of a nerve or muscle could be greatly stimulated or regulated. Miura propounded the theory that acupuncture produced localised damage to the skin, muscle, nerve and blood-vessel depending on the length of the needle and the location. The damage was preceded by a paralysing or anaesthetic effect, which again was preceded by a stimulating effect. It is said that during acupuncture nerves connecting the diseased organ are more sensitive and thus more easily stimulated than the other nerves in the body. Reports have been made that needling activates and increases the production of white corpuscles and fibrinogen in the blood. Fujii, for example, has carried out such tests on guinea pigs. Yet another explanation says that acupuncture helps to stop bleeding by stimulating the nerves leading to the blood vessel concerned and making the blood vessel contract.

CLAIMS OF EFFECTIVENESS

As there are innumerable literatures both ancient and modern, eastern and western, unless one has examined all the relevant references, no definite conclusion about the efficacy of acupuncture can be made.

Acupuncture is considered to be a universal panacea of all ills. Some claim that they have 'cured' such varied conditions as paralysis, apoplexy, diabetes, cholera, rheumatism, sprains, swollen joints and even tuberculosis.

When discussing the efficacy of acupuncture, exponents are always wont to be verbose. Some patients are also willing to provide profuse and eloquent testimonials for such effectiveness and many of these decorate the local acupuncturists' consultation rooms. One case seen by the writer in an acupuncturist's clinic illustrates this verbosity.

A female patient aged 36 was alleged to be suffering from total deafness due to prolonged Streptomycin therapy for her tuberculosis. She had been told by western-trained doctors that nothing could be done for her. She then sought the aid of the acupuncturist and when seen she had had 3 sessions of needling already. In order to impress the writer about her good progress, the acupuncturist became rather voluble about her ability to hear much better now. When questioned about her name in a loud voice and at near quarters however, she did not reply and much to the consternation of the acupuncturist she turned to him instead and asked when should she return. It was quite evident that she was still hard of hearing.

Recently, in the Chinese Medical Journal (in English) claims were made probably by Western-trained doctors that acupuncture as a form of treatment can be used effectively against diseases like Bacillary dysentery, Acute appendicitis, Schistomiasis and Deaf-mutism. One example report is summarized below:—

SUMMARY

1. The history of acupuncture and its development is briefly traced.
2. The two methods of acupuncture commonly employed in Singapore are outlined.
3. A description of some theories of acupuncture is made.
4. Some claims of the efficacy of acupuncture are listed.

ACKNOWLEDGEMENT

I am grateful to Mr. Yahya Cohen, F.R.C.S., Senior Surgeon, Singapore, who first suggested this study, for his encouragement and helpful criticisms.

In one report from the Department of Surgery, Chung Shan Hospital of the Shanghai First Medical College, 116 unselected patients

with acute appendicitis and appendicular abscess, admitted from September 1958 to January 1959 were treated with acupuncture without any operation or antibiotics. The overall recovery rate was 92.5%. That for simple appendicitis was 93.6% and for appendicular abscess was 83.3%. Careful follow-up of 80 patients showed satisfactory results in 90% of cases. (Chinese Medical Journal 80:2 p.103-108, Feb. 1960).

Ward (1858) reported the successful treatment of five different cases of neuralgia and rheumatism using the method of acupuncture. Goulden (1921) wrote an interesting account on the treatment of sciatica by means of galvanic acupuncture. He first sterilised and applied a local anaesthetic subcutaneously to the part concerned before introducing the needle. More recently Brav and Sigmond (1942) employed three different methods in the treatment of 62 cases of low back pain, 28 cases by injecting with a 1% solution of procaine, 17 cases by the injection of a saline solution and 17 cases by puncturing with a 2½ inch long No. 22 needle. Out of the total number of cases treated, 35 (i.e. 56%) were successful, varying from 18 cases with permanent cure and others without relapse of at least one year after treatment. The following table gives an analysis of the results obtained by the three methods:—

	<i>procaine method</i>	<i>saline method</i>	<i>acupuncture</i>
no. of cases treated	28	17	17
no. of cures	16 (57%)	9 (53%)	10 (59%)
no. of permanent cures	12 (43%)	2 (12%)	4 (24%)

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