Theoretical Approach

A Study on the Classification and the ‘Catching’ of the ‘Arrived Qi’ in Acupuncture

LAI Xin-sheng 蘭新升 & TONG Zhong 童钟
Laboratory of Acupuncture Principle, College of Acupuncture and Chinese Tuina, Guangzhou University of Traditional Chinese Medicine, Guangzhou, Guangdong 510405, China

Abstract: This essay studies the phenomenon of ‘obtaining of qi’ in acupuncture. Combined with clinical practice, the authors think that it was a habitual misunderstanding in the past to equate ‘needling sensation’ to ‘obtaining of qi’ in acupuncture practice. The two concepts are different and are related with each other. The authors have also classified the phenomenon of ‘obtaining of qi’ according to its depth in the skin layer. Based on the research achievements in neuroscience, the authors propose the study on ‘catching’ the specific cerebrations, so as to reveal the essence of ‘obtaining of qi’.

Key words: acupuncture; obtaining of qi; catching

The ‘obtaining of qi’ is a technical term in acupuncture, which plays the key role in the selection of manipulation techniques, the judgment of therapeutic effects and the body response to acupuncture, and thus it is an important content in the handing down and carrying on of acupuncture. However, from the ancient times to the present, the studies on ‘obtaining of qi’ are mostly limited in the written descriptions or oral instructions by individual doctors. Modern laboratory studies tend to pay more attention to the needling effects, while the study on the ‘obtaining of qi’ has always been at a standstill. Through studies on the classical theories, this essay has pointed out habitual misunderstandings about ‘obtaining of qi’, and combined with clinical practice, made it have its original meaning. Based on classification of its connotation and neuroscience, the authors propose that the key in the study of ‘obtaining of qi’ is ‘catching’ of the specific cerebrations.

Connotations of ‘Obtaining of Qi’ in Ancient Times and At Present
In Nei Jing (内经 Internal Classic) the term of ‘obtaining of qi’ can be found in four different chapters, the meanings of which are not completely the same. It is referred to the time for applying manipulation techniques: ‘twirling the needle while inhaling for obtaining qi’ (described in Su Wen (素问 Plain Questions)); or to the therapeutic effectiveness of acupuncture: ‘supplementing drugs beneficial to recover health and to help the source of formation of qi, which is a law of obtaining qi’ (described in Su Wen); or to the needling effect: ‘upon the arrival of qi, try to hold the qi (described in Ling Shu (灵枢 Miraculous Pivot)); or to the mechanism of acupuncture: ‘seeking qi in the stomach collaterals, and qi is obtained’ (described in Ling Shu). Anyhow, the four above mentions have one thing in common i.e. acupuncture gives its therapeutic effects by means of regulating qi activities of the human body.

Besides, another term in Nei Jing, ‘arrival of qi’ is also closely related with the therapeutic effect of acupuncture. For instance, ‘a very important thing in acupuncture is the arrival of qi, which can yield

Correspondence to: Prof. TONG Zhong
Email: tone2006@tom.com
This study was supported by a grant from National Basic Research Program of China (973 Program, No. 2006GB504505)
effectiveness’ (described in Ling Shu); ‘needling without the arrival of qi will not produce effect, no matter how many times of needling are given; while needling with the arrival of qi can give effects, and the patient can be cured and need no return visit’ (described in Ling Shu). Here, it is said clearly that ‘with the arrival of qi, the patient has qi regulated by means of the reinforcing and reducing needling manipulations and the disease is cured’. Obviously, the ‘arrival of qi’ and ‘obtaining of qi’ both indicate that the reinforcing and reducing needling manipulations can regulate vital-qi of the human body and make it in a favorable state.

Since ‘obtaining of qi’ is so closely related with the therapeutic effects that the later acupuncture expert YANG Ji-zhou stressed time and again in Zhenjiu Dacheng (Great Compendium of Acupuncture and Moxibustion) that ‘rather losing the time than losing qi’; and ‘if qi is obtained quickly in the needling, the disease is easy to be cured and the effect is quicker to show; if qi arrives slowly, the disease is difficult to cure and even incurable’. Therefore, how to judge the ‘obtaining of qi’, the so called ‘differentiating qi’ has become the problem for every acupuncture doctor. DOU Han-qing in the Jin and Yuan Dynasties said in Biaoyoufu (Poems of the Expounding of the Abstrusenesses) that ‘the arrival of qi could be felt like the sinking and floating of bait hook caught by fish; while the absence of arrival of qi would be felt like staying in secluded courtyard’; and ‘light-fine-slow sensation under the needle might indicate no arrival of qi, while deep-hesitant-tense sensation would indicate the arrival of qi’, which has always been considered to be the most figurative description of the ‘obtaining of qi’.

The sensation under the needle felt by the practitioner and the subjective experience of the patient have all been mentioned in large numbers of acupuncture works of the past ages. For instance, LI Yan of the Ming Dynasty said in Yixue Rumen (Elementary Medicine) that ‘the tight and heavy feeling under the needle felt by the practitioner indicated the arrival of qi, and that the painful sensation felt by the patient would indicate the excess syndrome and the soreness sensation would indicate deficiency syndrome’. At present, the ideas found in the text books are as follows: When qi has arrived, the practitioner can have the sensation of deep, tense, hesitant, stagnated or shaking of the needle body; when qi has not yet arrived, the practitioner can feel under the needle the sensation of hollow, loose, empty, and slippery, when the needle can be gently lifted. Besides, when qi has arrived, the patient can have soreness, numbness, distending, heavy, electric shock-like, cool, warm, and or water wave-like sensation. The specific sensations are all called ‘needling sensation’.

From the above descriptions we can see that the needling sensation involves the sensations felt by both the acupuncturist and the patient, habitually known as ‘obtaining of qi’. Since needling sensation has traditionally been taken as the standard for ‘obtaining of qi’, many acupuncture doctors hold that when the needle is inserted into the skin to a certain depth, needle manipulations such as lifting-thrusting and twirling are followed to produce some specific sensations and responses in the local needled area, which is called ‘obtaining of qi’.

However, some people dissent the idea that ‘obtaining of qi’ equates to ‘needling sensation’. Firstly, there is very clear description in Nei Jing about the sensations experienced by the patient that ‘when needling is applied for the deficiency syndrome, there should appear warm sensation under the needle, because warm sensation can only be produced when the vital-qi is ample; and when needling is applied for the excess syndrome, there should appear cold sensation under the needle, because only declined qi due to illness can bring about cold sensation’. In the above description, we can not find the present understanding about ‘needling sensation’.

Secondly, the ‘nine types of needling’ and ‘twelve types of needling’ mentioned in Nei Jing and many needling methods in modern clinical practice, such as auricular needling, scalp needling, wrist-ankle needling, and subcutaneous needle-embedding, never lay stress on the ‘needling sensation’. However, they have all been proved effective in clinical practice. Thirdly, the ‘obtaining
of qi is not stressed when needling is applied for children and slim and weak patients, for instance, 'superficial needling and quick withdrawal of the needle for children' and 'superficial and quick needling for slim people' (described in Ling Shu). When needling at Renzhong (GV 26), Shixuan (EX-UE11), and the twelve jing (well) points applied for patients with sensory disturbance such as apoplectic convulsion, except for sharp pain, there won’t appear any ‘needling sensation’, but shows marked effects. There are also many patients who have very good effects from acupuncture treatment but do not always have the ‘needling sensation’. Some other patients may have obvious ‘needling sensation’ in the beginning of the treatment, which may decrease and not accompany them in the whole course of the treatment. The degree and existence of ‘needling sensation’ are also sometimes related with the body condition of the patient.

Therefore, some researches think that the appearance of needling sensation is the result of irritation to different body tissues. For instance, when periost, fascia, tendon sheath and ligament are touched, there may appear painful sensation; dragging and pulling the muscle tendon can bring about soreness sensation; and irritating the nerves can produce the electrical shock-like sensation. The appearance of needling sensation is more related with the tissue anatomy of the needled area. It lacks scientific basis to make judgment of prognosis simply by the needling sensation. However, some patients who do not have the traditional needling sensation, or only the practitioners have the needling sensation, can have their diseases been treated. For this phenomenon, some researchers think that it is related with the differences of sensation threshold and body constitution between individual patients, which belongs to ‘latent obtaining of qi’.

From the above, we can see that in traditional acupuncture theory the ‘obtaining of qi’ is essential for the therapeutic effect. Whereas, in clinical practice, ‘needling sensation’ and therapeutic effect are not always correspond to each other. Therefore, ‘needling sensation’ may not equal to ‘obtaining of qi’.

Modern Researches on ‘Needling Sensation’ and ‘Obtaining of Qi’

At present, it is rare to find researches directly related to the relationship between ‘needling sensation’ or ‘obtaining of qi’ and the therapeutic effects. There is foreign report on the sensation of getting qi (De-Qi sensation) through observing body sensation inducing changes of the electric potential F wave. It has been found that acupuncture effect is closely related with the intensity of stimulation. But the research thinks at the same time that ‘De-Qi sensation’ is not absolutely essential to the needling effect. Some domestic researchers once observed on the impact brought about by different states of getting qi on the electro-gastrogram and cardiac function. The state of patient having the sensation of soreness, numbness, distending and heaviness and the operator also having heavy and solid sensation under the needle was considered to be dominant obtaining of qi. The sensation that only the operator had but the patient did not have was considered to be latent obtaining of qi. The result showed that the effect with obtaining of qi was better than that without obtaining of qi; while the effect with dominant obtaining of qi had no obvious difference from the effect with latent obtaining of qi. The result of this research indicated indirectly that the needling sensation of the patient had not exerted much impact on the therapeutic effect. Besides, in a foreign research of consolation needling, it is found that the ratio of soreness, numbness, distending and heaviness sensations reported by the acupuncture group was nearly the same as that reported by the consolation needling group (needled with the needle tip only inserted in the skin without penetrating the skin). It seems that this result of obtaining of qi sensed by the patient is not reliable.

What should be paid attention to is that for a long time in the past in acupuncture experiments ‘the obtaining of qi’ has not been paid attention to, or needling sensation was taken to replace ‘obtaining of qi’; and in the selection of some placebo needlings, the similarity in form to the needling is not only required, and some non-specific body sensation brought by the needling must also be excluded, which
resulted in the contradiction between ‘needling sensation’ and ‘obtaining of qi’. Therefore, the authors think that it is a misunderstanding at present to take habitually ‘obtaining of qi’ simply equal to ‘needling sensation’, or to use the degree of ‘needling sensation’ to replace ‘obtaining of qi’ in judging the therapeutic effects.

The Classification of ‘Obtaining of Qi’ in Acupuncture

Although ‘needling sensation’ is not equal to ‘obtaining of qi’, acupuncture will certainly bring about sensory responses. Because the human body will certainly have corresponding sensory responses to a certain physical stimulations; and the sensations of ‘soreness, numbness, distending and heaviness’ may usually make people unhappy, even unacceptable. However, ‘the obtaining of qi’ should be a comfortable feeling after the patient receiving needling with the reinforcing and reducing manipulations applied, which is a light feeling like disease being eliminated. Therefore, the ‘needling sensation’ felt by the patient should be, as a matter of fact, a ‘side effect’ accompanying with the needling. The acupuncture doctors should determine whether the needling sensation is needed, but should not seek for the needling sensation as the purpose.

However, ‘needling sensation’ is not completely without any relationship with the ‘obtaining of qi’. It has been mentioned in the previous part of the essay the patient’s feeling of ‘cold sensation under the needle’, and ‘warm sensation under the needle’; and that ‘needling for deficiency syndrome, the reinforcing method should be used to wait for yang-qi to come, and the needle should be taken out till the appearance of warm sensation under the needle’. Here, the needling sensation is used to evaluate the therapeutic effect. Besides, the description that ‘the pathogenic-qi can be felt tense and quick’, and Gu-qi (essential-qi from food) can be felt slow and gentle (described in Ling Shu) refers to the fact that the doctor can judge the pathogenic- or vital-qi and deficiency or excess according to the ‘tense-quick’ or ‘slow-gentle’ feeling under the needle. However, no matter the feeling of the doctor or that of the patient is only the superficial description and indirect experience about ‘obtaining of qi’. The decisive function for the therapeutic effect should be ‘Gu-qi’ (essential-qi from food) or ‘vital-qi’ aroused by acupuncture.

Therefore, the authors think that in a broad sense, the ‘obtaining of qi’ should involve three types. The first type of qi is called ‘Zhen-Xiang’ (针响 needling response), the subjective feeling of the patient, including ‘cold sensation under the needle’, ‘warm sensation under the needle’; and ‘feeling of soreness, numbness, distending and heaviness’. The second type of qi is called ‘qi felt by the doctor’, indicating the deep, tense and hesitant feeling under the needle felt by the operator. The third type of qi is the ‘obtaining of qi’ in the real sense, i.e. the Ying- and Wei-qi (vital-qi) transformed from the stomach-qi aroused by acupuncture so as to obtain the therapeutic effect, which is the so-called ‘seeking qi in the stomach collaterals, and qi is obtained’. The three types of obtaining qi are different in levels. The first two types should be primary, elementary, and starting. Only when the doctor has differentiated clearly, on the bases of the first two types, the nature of the disease, such as the cold, heat, deficiency or excess; the excess or deficiency of yin and yang; and big or small of the channel-qi, and then gives further reinforcing or reducing manipulations, can qi of the secondary and high level be obtained. This is the so-called ‘Zhi Shen’ (治神 perfect treatment). This is the inner essence of acupuncture adjustment and the reinforcing and reducing manipulations, and a vivid explanation of the therapeutic effect of acupuncture, which is the realm of perfection that a skillful acupuncturist should attend.9

The ‘Catching’ of the Arrived Qi

As far as the ‘needling sensation’ is concerned, it is easy for a beginner to get it, but to obtain ‘effectiveness upon the arrival of qi’ is not at all an easy thing. When talking about ‘arrival of qi’, it is explained in Nei Jing that after insertion of the needle, ‘retain the needle for a long time to wait for the arrival of qi’, just like ‘waiting for something
precious till late of the day’. The ‘retaining of the needle for a long time’ is not actually the same as the modern popular manipulation technique to induce qi. There won’t show effectiveness, no matter what manipulation technique is applied if there is no arrival of qi. As is said, ‘needling without the arrival of qi would be in vain, no matter how many manipulation techniques are applied’. Therefore, the actual ‘obtaining of qi’ can neither been simply judged by ‘needling sensation’ nor forced to obtain by manipulation techniques. Clinically, the ‘obtaining of qi’ depends mostly on the operator’s experience. However, in the experimental research, this experience seems somewhat subjective and at will, which results in the fact that it is difficult to conduct research on acupuncture. Whereas, the study on the mechanism of acupuncture requires us to seek for objective bases closely related with the therapeutic effect. Therefore, the essence of ‘obtaining of qi’ needs ‘catching’ by means of modern scientific researches.

Seeing from the angle of neuroscience, being an outer stimulation, needling at a certain point is to activate the regulation and control function of the central nervous system first through the perception of the nervous system to further yield peripheral effect. A research on body sensation inducing electrocortical potential has found that the stimulation that induces changes in cortical electrical activity of the brain is related with the specificity of the point, which is not shown by the skin stimulation at non-standard point. The research on electrical needle stimulation in different ways and with different frequencies has found that the changes in electroencephalogram waves forms obtained by needling at the standard points and non-standard points have obvious differences. The acupoint may have polymodal receptor which is closely related with the transmitting pathways of the central nervous system. The researches on the analgesic mechanism of acupuncture have already confirmed the material basis for the effect of acupuncture in the nervous system, such as the endogenous opioids and non-opioids, the nitric oxide and nitric oxide synthetase in the pathway of the dorsal spinal cord – thalamus, and the transmitter acetylcholine of the posterior ending of efferent vagus nerve.

After 1990s, the imaging technology on the brain functions has been broadly used in research on the mechanism of acupuncture. Through researches for needling in normal people at the points related to auditory sense and visual sense which may bring about cortical auditory and visual responses, it has been found that the points with specific therapeutic effects have close relationship with the brain areas having the corresponding functions. Compared with tactile stimulation that can only bring about sensory cortical activity, acupuncture can bring about infracortical nerve nucle activities in addition to the cortical activity. Besides, comparison of the results between electric stimulation at the real points and at the non-standard points shows that the difference lies mainly in the infracortical nerve nuclei activities.

Being the perceptive center, the brain responds to various stimulations. The proposal of ‘catching’ the arrived qi is aimed at seeking for the bases related to the needling therapeutic effects in various complicated brain responses. The above-mentioned researches suggest that the action of acupuncture is closely related with the brain functions, in which multi-levels of the nerve nuclei are involved. The close relationship between acupuncture therapeutic effects and infracortical nerve nuclei activities indicate that the key point for ‘catching’ the arrived qi lies in the infracortical center, and which should be set up on the basis of clinical therapeutic effects. The authors believe that the key in the study of ‘obtaining of qi’ lies in ‘catching’ the specific brain functional activities, and the breakup in the study of ‘obtaining of qi’ will certainly promote the development of acupuncture science, which is of profound significance for study of the mechanism of acupuncture and moxibustion.
REFERENCES


(Translated by WANG Xin-zhong 王新中) 
Received June 1, 2009