

A Brief Discussion on the Concept of Location San Jiao

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Abstract

San Jiao is one of the most controversial concepts in traditional Chinese medicine. With the changes of history, the concept of San Jiao was developed into another concept, "Location San Jiao", on the basis of "Liu Fu San Jiao". However, the appearance of "Location San Jiao" makes the concept of San Jiao more complicated and controversial. This paper will explore from the origin of "Location San Jiao", analyze the origin of its argument, and discuss the problems in it, so as to preliminarily clarify the connotation of San Jiao conception. Through investigation, it is found that the "Location San Jiao" is actually the dissimilation of "Liu Fu San Jiao", and the three parts of "Liu Fu San Jiao" should be divided by functional features rather than anatomical structure.

Keywords: Location San Jiao, Concept of San Jiao, Origin of Location San Jiao, Traditional Chinese medicine

Background

There are three main concepts of San Jiao, "Liu Fu San Jiao", "Location San Jiao" and "Syndrome Differentiation San Jiao". The meaning of "Liu Fu San Jiao" is one of the Six Fu organs as the most basic meaning of San Jiao in traditional Chinese medicine (TCM) theory, with no doubt; "Syndrome Differentiation San Jiao" is the program of syndrome differentiation of febrile diseases, which has its origin and clinical significance. But the pointview of "Location San Jiao" is raised from where and what the connotation of it is, few knows.

The Meaning of Location San Jiao

As modern common views, the textbook [1] puts forward the Location San Jiao and Liu Fu San Jiao concepts as parallel. It is believed that the meaning of Location San Jiao is the three parts of the body--the upper, middle and lower parts, which is thought derived from the interpretation of *Huang Di Nei Jing*.

The Location San Jiao corresponds to viscera and body structure. The Upper Jiao includes the above of diaphragm, heart and lungs, head, or upper limbs; The Middle Jiao includes the abdomen above the umbilicus and below the diaphragm, spleen, stomach, liver and gallbladder; Lower Jiao includes abdomen below the umbilicus, small intestine, large intestine, kidney, bladder, Nv Zi Bao (similar as uterus), sperm chamber and other viscera and lower limbs.

The function of Location San Jiao are described as two parts. First, the overall physiological function of it. *Nan Jing* says: "San Jiao transports the original

Qi." Therefore, Location San Jiao can be used for Qi transportation. And it also has the function of moving body fluid, which based on the description of Liu Fu San Jiao, "the officials who deal with dredging work make the waterways come out", which recorded in *Huang Di Nei Jing*. Second, the functions of three parts of Location San Jiao. The functions of the upper, middle and lower three parts are defined by the functions of its corresponding Zang Fu organs, and the functions of the three parts of San Jiao described in *Nei Jing*. For example, the Upper Jiao's function contains the function of heart and lung which can transport nutrients to nourish the whole body, and "Upper Jiao is like fog" (*Huang Di Nei Jing*) is its characteristic; Middle Jiao contains the functions of digestion of spleen, stomach, liver and gallbladder, as well as the saying of "Middle Jiao is like retting pond" (*Huang Di Nei Jing*); Lower Jiao has the function of excreting dregs from the small intestine, large intestine, kidney and bladder, as it says, "Lower Jiao is like gutterway" in *Huang Di Nei Jing*.

There are some doubts and controversies in the process of division and function definition of Location San Jiao.

Doubts in the Definition of Location San Jiao

First of all, the definition of Location San Jiao inappropriate to break away from the original meaning of San Jiao as one of the Six Fu organs and need not be created with a new connotation. The name of San Jiao comes from *Huang Di Nei Jing*, and first of all, it is widely recognized as one of "Six Fu". And the saying of three parts of San Jiao comes from the sentences, "Upper Jiao is like fog; Middle Jiao is like retting pond; Lower Jiao is like gutterway" recorded in *Nei*

Jing, which is also produced from the concept of Six Fu San Jiao. So the definition of Location San Jiao and its three parts all should belong to the concept of Six Fu San Jiao. Secondly, the Location San Jiao definition is not in line with the traditional Chinese medicine thinking ways, because it correspond San Jiao to the anatomical parts of the body mechanically. From the point of view of naming ways, "Location San Jiao" has lost the word meaning of "Jiao". If the meaning of "Location San Jiao" is the division of the structure on the human body, with its corresponding anatomical structure, such as Upper Jiao means heart and lung, head and upper limbs, then Location San Jiao does not need to be called "San Jiao", it could be only called "three parts". So the vocabulary of Location San Jiao is not built under the guidance of TCM thinking ways, which connotation attaching importance to structure and local parts and making light of entirety and function. Therefore, the concept of Location San Jiao is already a connotation of western medicine in virtue, with the coat of TCM. So it could not be counted as a concept of TCM.

Controversies Function of Location San Jiao

The function of Location San Jiao is consists of two parts. On the one hand, the function of the corresponding Zang Fu; on the other hand, the function from TCM classics points. This also caused internal chaos which connotation neither belongs to TCM nor to western medicine.

About the function of the corresponding Zang Fu, its statement has its own contradiction. For example, if Upper Jiao includes the heart and lungs, its function is "heart and lung's nutrition function of the whole body" and characteristic by "Upper Jiao is like fog", as it says in text books. Since Upper Jiao includes the heart and lungs, then why the function, like "heart dominates spirit" and "lung controls breath" of Zang Fu's function, are not all included? This conflicts are caused by the reason that there is no differentiation between Zang Fu and Location San Jiao functions and no criterion for how they make their functional differentiation.

Location San Jiao uses the function of San Jiao in classic as its own. For example, *Nan Jing* says that San Jiao has the function of transporting Original Qi, then how to ascertain the function in classic is talked about the "Location San Jiao" rather than Six Fu San Jiao? And the function of running body fluid is belong to Liu Fu San Jiao originally, why could it belong to Location San Jiao again, and what its significance is?

Why do researchers create the concept of "Location San Jiao", which is so contradictory and does not conform to the definition of TCM concept, and how does the concept form gradually?

History of the Formation of Location San Jiao

Concept

The theory of Location San Jiao originates from classical scripture, but it is alienated from TCM theory.

The saying that San Jiao is divided into upper, middle and lower parts, which is first recorded in the text of *Huang Di Nei Jing*. The text is "Huang Di says, I want to know where Ying Qi and Wei Qi come from. Qi Bo replied that Ying Qi comes from Middle Jiao and Wei Qi comes from Upper Jiao. Huang Di says that I wish to know San Jiao's meaning. Qi Bo says, Upper Jiao starts from the upper opening of stomach, and above pharynx, through diaphragm, while disperses in the chest, through axils, following the space of Tai Yin channel... I want to know where Middle Jiao comes from. Qi Bo replies, Middle Jiao is also in the stomach, below Upper Jiao, where achieve Qi, discharges droppings, evaporate body fluid and create essence... I like to know Lower Jiao's meaning. Qi Bo replies that Lower Jiao makes ileum separated, injecting into bladder; so grain is often stored by stomach, and changed into dross, then into the large intestine then this process could be called Lower Jiao, which is characteristic by infiltration downward. Exocrine juice, follow Lower Jiao and infiltrate into the bladder." As the canon says, San Jiao has three parts, the upper part, the middle part and the lower part, and there are vocabularies like anatomical position in the text truly.

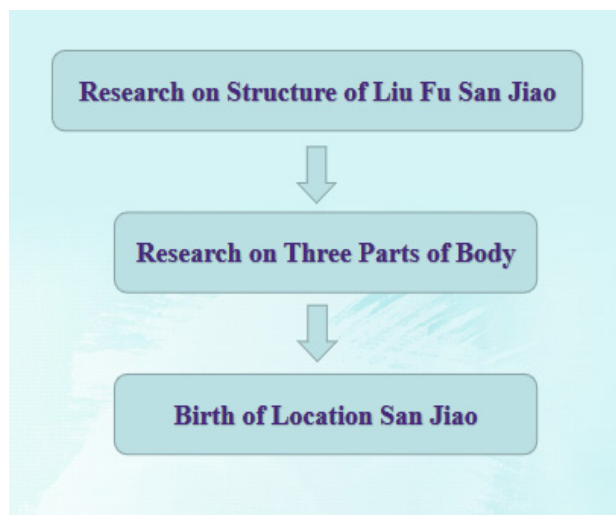
In other classics, there are also descriptions of three division of San Jiao. For example, in the *Zhong Zang Canon*, it is also considered that the San Jiao is "three kinds of Yuan Qi of human beings", and named the San Jiao as "San Guan on the top, Huo Luan in the middle and Zou Bu at the bottom". And *Shang Han Za Bing Lun* says, "illness becomes worse when using decoction, then the disease location is at Upper Jiao", "heat in the Lower Jiao always causes lower abdomen full", from which we can find that disease differentiation application in different parts of San Jiao. So it can be scrutinized that San Jiao really has its three different location parts.

Then later generations of medical experts have made efforts on the research of anatomical location of San Jiao. Such as, Yu Tuan's book, *Yi Xue Zheng Zhuan* recorded, "San Jiao refers to the cavity, contains the intestines and stomach. Upper Jiao is above Huang Membrane in the chest; Middle Jiao is Under Huang Membrane and above the umbilicus; below the navel is Lower Jiao. They all together are called San Jiao." For another example, the book *Nan Jing Hui Zhu Jian* of Shan-Lei Zhang in Qing Dynasty said, "if San Jiao refers to the three parts of body, then the position of heart and lung is called Upper Jiao; the position of spleen and stomach under diaphragm is called Middle Jiao; the position of kidney, bladder and small intestine under waist is called Lower Jiao." Then the research of pursuing location of San Jiao is transforming into

forming the concept of Location San Jiao.

With the intervention of modern scientific experimental technology, Chinese medical experts use western medical thinking ways to explore the anatomical structure of San Jiao. Some medical experts believe that San Jiao, as one of the Six Fu organs, must have its specific morphological structure and physiological function. Experts hold different opinions, some believe that San Jiao is pancreas organ [2]; Chun-Bo Han [3] believes that the essence of San Jiao is the spinal cord, because the function of San Jiao is similar to some nerve functions of the brain and spinal cord, and its anatomical location is also corresponding to the anatomical location of the spinal cord. And Some doctors believe that San Jiao can not be a single anatomical structure, while it must be the combined functions of many anatomical structures. For example, Tian-Hong Zhang, Sen Zhong, and Yong Peng [4] believe that San Jiao consists of omentum majus, mesentery, ureter and the lymphatic system of the abdominal cavity.

At the beginning, the medical researches is to explore anatomical structure of Liu Fu San Jiao. But it is evolved into a research of three-part division of the human body. For example, Qi-Lan Chen and Yi-Ping Gong [5] believe that the Upper Jiao should be composed of respiratory membrane, pleura and pericardium; Middle Jiao corresponds to the gastric and small intestinal mucosa and related peritoneum; Lower Jiao is the membrane of filtration between the mucosa of the large intestine and the glomerular and renal vesicle and the peritoneum. Yu-Long Sun [6] points out that San Jiao is an organ that gathers the outside of Five Zang and Six Fu organs. So Upper Jiao includes tubes of heart, weasand and esophagus; Middle Jiao is the pancreas; Lower Jiao indicates prostate gland, seminal vesicle gland, urethral bulbar gland of man and they are ovarian, uterus, vestibular big gland of woman. So the exploration that San Jiao corresponds with which organs has become a research hotspot.



It can be seen that the concept of Location San Jiao originated from the research of position of Liu Fu San Jiao in *Huang Di Nei Jing*, and is gradually put forward through the process of searching anatomical division of Liu Fu San Jiao by the later medical experts.

Divison of San Jiao by Its Functional Features

The Six Fu organs all have their positions, so do the San Jiao. Just as the history of the formation of Location San Jiao mentioned above, according to the text in *Huang Di Nei Jing*, Upper Jiao starts from the upper opening of stomach, and climbs the above of pharynx, goes through diaphragm, disperses in the chest, goes through axils, follows the space of Tai Yin channel; Middle Jiao is also in the stomach, below Upper Jiao; Lower Jiao makes ileum separated, injects into bladder. And combining with another passage in *Huang Di Nei Jing*, the hand meridian of Shao Yang San Jiao starts from ring finger, goes through between the two fingers, climbs the wrist watches, walk through the space between two bone of forearm outside... scatters under the diaphragm, reaches San Jiao. *Huang Di Nei Jing* also says, "Upper Jiao is like fog; Middle Jiao is like retting pond; Lower Jiao is like gutterway." As the scriptures say, Liu Fu San Jiao does have its corresponding position, but the three parts are not clarified by anatomical position simply, but with its functional features. As scriptures say, the emphasis is not on the position of San Jiao, but knowing where its Qi's moving path. In addition, TCM usually does not value studies of anatomical structures, but to study the function of the human body.

As Liu Fu San Jiao, it must have the characteristic function of Fu, like "it can transfer the food and water without storing them, and it takes them in and moves them out". San Jiao, as a big Fu, has three kinds of functions, shows different dynamic shapes when it transforms and transports food and water. That is to say, the different parts of San Jiao should be divided according to their different characteristics of water and grain transportation. "Upper Jiao is like fog", which means when the food and water are transformed initially, producing the phenomenon of gas raising, and the gas movement route is named Upper Jiao; "Middle Jiao is like retting pond", which indicates the scene of food retting, and where the food Qi is named Middle Jiao; "Lower Jiao is like gutterway", which indicates food materials divide into two places, where the dross could be educated and the essence be absorbed, and their path is called Lower Jiao. And the whole process of food changes showing different images, all caused by San Jiao. This is the characteristics of Six Fu organs, "transformation of substances", "flavor transition in and out", and among the whole process, there is also the Qi movement and body fluid transportation. In short, "San Jiao is the road of food and water, where

shows the Qi's beginning and Qi's ending." (*Nan Jing*)

Though Liu Fu San Jiao has its structure as its basis actually, the position of San Jiao should not be a simple corresponding anatomical structure of the human body, but it is the descriptions of the state of water and food changes. In brief, San Jiao is divided by functional features, then gets the name of Upper Jiao, Middle Jiao and Lower Jiao, and it can't be divided in structures mechanically and corresponding to some fixed structures.

Conclusion

To sum up, the concept of Location San Jiao is produced in the process of the alienation of exploring the position of Liu Fu San Jiao, which is out of the thinking method of *Huang Di Nei Jing* and is influenced by western medicine thoughts, with the connotation which has many omissions, causing more confusion of understanding the concept of San Jiao. So the concept of Location San Jiao is not desirable and should be canceled. And the holistic view is applied in every concept of TCM. Therefore, the parts of Liu Fu San Jiao should be divided according to its function characteristics, not simply separated mechanically in the physical structures.

References

1. Sun GR, Zheng HX. Basic Theory of Traditional Chinese Medicine. Beijing: China Press of Traditional Chinese Medicine, 2017. (Chinese)
2. Shi XJ, Tian YH. A Brief Discussion on the Essence of San Jiao is Yi Fu. *J Tradit Chin Med* 2006, 47: 397. (Chinese)
3. Han CB. The Essence of "San Jiao" and Its Application in Gynecological Diseases. *Chin Med Guide* 2012, 10: 279-280. (Chinese)
4. Zhang TH, Zhong S, Peng Y. The Re - Exploration of the Essence of San Jiao. *Henan Tradit Chin Med* 2012, 32: 137-139. (Chinese)
5. Chen QL, Gong YP. Exploration on the Essence of "San Jiao". *J Beijing Univ of Tradit Chin Med* 2013, 36: 311-313. (Chinese)
6. Sun YL. The Research of San Jiao's Name. *J Beijing Univ of Tradit Chin Med* 2008, 31: 153-157. (Chinese)

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