

From The Anatomical Discovery of Meridians And Collaterals To Fasciology Theory

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Collateral theory is the basis of traditional Chinese medicine (TCM). In the visible Chinese human project (VCH), a national basic research program of China, the computer constructed the areas of intermuscular septum which rich in fascial connective tissues were found more string-of-beads structures. The more fascia connective tissue areas were constructed, the more string-like structures were found. Some fascial connective tissue appeared in a line-like pattern and was co-localized with traditional Chinese meridians. When 3-D structures of all fascia connective tissues through all over the body were constructed, a body-shaped connective tissue network appeared. We proposal that the fascial network distributed over the human body is the anatomical basis for the acupoints and meridians of traditional Chinese medicine.

Fascial anatomy: In biological evolution, the fascia network is homologous with the extracellular matrix of a single germ layer organism, the middle lamella of a two germ layer organism, and the mesenchyma of a three embryonic layer organism. Therefore, we put forward a new theory of two systems. A human body can be divided into two major systems. One is the supporting-storing system, which is consisted of undifferentiated stem cells of unspecialized connective tissues. The other one is the functional system, which is consisted of diverse differentiated functional cells supported or enclosed by the supporting-storing system. The undifferentiated stem cells in the supporting-storing system incessantly differentiate into functional cells. The supporting-storing system throughout the body regulates the functional and living status of differentiated cells and provides a stable environment for the survival of

these cells. Therefore, we put forward a new approach for division of anatomical discipline. The anatomical discipline which based on the two systems is named fascial anatomy. Fascial anatomy study the human body is from the biomedical research into how organisms survive longer cycle which is different from the regional anatomy study by the way of structure and the systematic anatomy study by the way of function .

Fasciology: The discipline that studies the supporting-storing system and the mutual relationship between this system and the functional system in a living human body is called Fasciology. Fasciology have point out the biomedical orientation of traditional Chinese medicine theory. According to Fasciology, from the axis in the absence of biological life of Darwin's theory of evolution to the Yellow Emperor's understanding of the life axis, we would be easy to study biomedical research from the two-dimensional coordinates into a more complete three-dimensional construction of coordinates. TCM biomedical intervention will make biomedical research from the scientific level of two-dimensional into three-dimensional. The establishment of fascial anatomy and Fasciology opens a new research field in anatomy; consequently, Fasciology will play a significant role in biological medicine and traditional Chinese medical research, as well as future clinical practice.

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