

STRUCTURAL STUDY OF INDRABASTI MARMA IN UPPER EXTREMITY

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ABSTRACT

Marma is imperative point in the body. Total number of marmas are one hundred and seven. Sushrutacharya have mentioned marma concept in Sharirsthan 6th adhyaya i.e. Pratyekmarmanirdeshshaariropakram. Aacharya Sushrut has mentioned a variety of marma. The arrangement is based on four types by Sushrutacharya. It is given as marmaprakar (types of marma) as per Shadanga, Rachana, Parinam and Pariman. Rachanatmak cataloging of marma is based on five rudiments as Mansa, Sira, Snayu, Asthi and Sandhi. According to the basic definition of marma as per Sushrutacharya, the marma is the site where mansa, sira, snayu, asthi and sandhi are cooperatively present. Indrabasti marma is present in the urdhwashakha (Upper extremity) as well as in adhoshakha (Lower

extremity). In upper extremity, it is present in the centre of the forearm, slightly at the lateral aspect where the radial artery passes. So, it is obligatory to see the basic components as per the definition of marma given by Sushrutacharya with the help of cadaveric dissection method. So this can actually identifies the modern correspondence of these five basic structures.

KEYWORDS: Marma, Rachanatmak cataloging, Indrabasti marma in upper extremity.

INTRODUCTION

In Ayurved, various crucial points are mentioned which are essential to recognize. In Rachana Sharir, many significant concepts related to human body are explained. Predominantly in this view, Acharya Sushrut has explained this topic in his respective samhita in Sharirsthan. Amongst all those points, Marma is one of the key aspects.

Marma is the basic aspect in human body. Sushrutacharya mentioned this perception in Sharirsthan 6th adhyaya. He defines marma as the site in which there is existence of Mansa (muscles), Sira (vessels), Snayu (ligaments/tendons), Asthi (Bones) and Sandhi (Joints).^[1] The blending of all these five structures constitute the marma sthan. These points are seats of existence. In each marma one of the components is mostly present and others present in traces. Also, arrangement of marma is mentioned under certain categories. Such as types of marma according to Shadang (Location), Rachana (Structure), Pariman (Measurement) and Parinam (Injury results).^[2] Out of this, as per Rachana, above mentioned five types are present.

The details of Indrabasti marma are as follows,

Table No. 1: Information of Indrabasti marma.^[3]

Name of the marma	Indrabasti
Location	Urdhwashakha (Upper extremity) centre of the forearm, slightly at the lateral aspect where the radial artery passes.
Number	02
Rachanatmak	Mansa marma
Parinam	Kalantarpranhara
Pariman	1/2 anguli (fingure breadth)
Marma viddha laxan	Shonitkshayen maranam (Death due to excessive hemorrhage)

Marmas are also called as half part of Shalyatantra (Surgery). It is for the reason that while doing any surgical process a surgeon must have the basic knowledge of the structures which are present at the operational site.^[4] For this, the knowledge of marma is vital. So, it is essential to see the five basic structures present in it with the help of modern anatomy by using cadaveric dissection analysis method.

MATERIAL AND METHODOLOGY**MATERIAL****Literary Study**

1. Marma literature available from Ayurvedic and modern texts.

Cadaveric study

1. Corpse – 1 male cadaver.
2. Instruments – Dissection belongings.

METHODOLOGY

1. Literary study of Indrabasti marma was done using all the concerned Ayurvedic and modern text books.
2. Dissection of selected male corpse was done with the help of dissection instruments of related to Indrabasti marma (in upper extremity) at the dissection hall of Dr. J. J. Magdum Ayurved Medical College, Jaysingpur, Maharashtra, India.
3. From the foundation of literary study, recognition of Indrabasti marma was done on the cadaver.
4. On the basis of proportions given in Samhitas, the area was marked around the Indrabasti marma point.
5. Detailed analysis was done concerned with the marked points.
6. With the help of precise and thorough dissection, related structures of Indrabasti marma in terms of Mansa (muscles), Sira (vessels), Snayu (ligaments/tendons), Asthi (bones) and Sandhi (joints) was acknowledged as mentioned in hypothesis.
7. Concerned interpretation was correlated with the hypothesis about the Ayurvedic rachana of Indrabasti marma under the headings of Mansa, Sira, Snayu, Asthi and Sandhi.

RESULTS AND DISCUSSION**RESULTS****Table No. 2: Structures seen at the site of Indrabasti marma during the dissection.** ^[5,6,7]

Sr. No.	Ayurvedic View	Modern Correlation
1	Mansa	Flexor pollicis longus, Pronator teres, Extensor carpi radialis longus and Brachioradialis
2	Sira	Radial artery and tributaries of cephalic vein, Median Nerve
3	Snayu	Tendon of Pronator teres and Brachioradialis muscles
4	Asthi	Anterior and lateral surface of Radius
5	Sandhi	No relative comparative structure was found



Photo – 1: Extensor carpi radialis longus Muscle.



Photo – 2: Radial Artery.



Photo – 3: Brachioradialis Muscle.



Photo -4: Pronator Teres Muscle.



Photo – 5: Median Nerve.

DISCUSSION

There are many references available about the marma by various Aacharyas. But Sushrutacharya has given more elaborative information about the different marmas. He has given the fundamental meaning of marma as it is the combination of Mansa (Muscles), Sira (Vessels), Snayu (Ligaments/Tendons), Asthi (Bones) and Sandhi (Joints). All above five structures are present in each marma. The high proportion of each structure varies in particular marma. Classification of marma is explained as Shadangbhed (Location), Rachana (Structure), Pariman (Measurement) and Parinam (Injury result). In this study, more stress is given on the classification of marma as per Rachana (Structure). Indrabasti marma is present in upper limb at the centre of the forearm more towards lateral side. It is Kalantarpranahar marma means injury to this marma will produce death within few days. The five comparative structures seen during the dissection are as, Mansa - Flexor pollicis longus, Pronator teres, extensor carpi radialis longus and Brachioradialis, Sira - Radial artery and tributaries of cephalic vein, Median nerve, Snayu - Tendon of Pronator teres and Brachioradialis muscles, Asthi Anterior and lateral surface of Radius and Sandhi - No relative comparison was found. Along with Indrabasti marma there are other marmas which are called as kalantarpranhar in the upper extremity such as, Kshipra and Talahriday.^[8]

CONCLUSION

Aacharya Sushrut has specified the information and magnitude of marmas according to Shalyatantra (surgical point of view). So, he has given unique sorting of marmas. Out of 107 total marmas, 33 marmas are kalantarpranhar marmas. 6 kalantarpranhar marmas are present in the upper extremity. Indrabasti marma represents the centre of forearm area along with its related structures as, Flexor pollicis longus, Pronator teres, extensor carpi radialis longus and Brachioradialis, Radial artery and tributaries of cephalic vein, Median nerve, Tendon of Pronator teres and Brachioradialis muscles, Anterior and lateral surface of Radius.

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