Original Research Paper

Volume-9 | Issue-11 | November - 2019 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Anatomy

A CRITICAL STUDY OF PRATHU SNAYU AS DESCRIBED IN SHUSHRUT

Dr. Sunil Dutt Dwivedi — Assit. Professor Sharir Rachana Department Major Sd Singh P.G. Ayurvedic Medical College And Hospital, Farrukhabad

Dr. Shushant Shukla* — Assit. Professor Sharir Kayachiktisha Department Vijayashree Ayurvedivc Medical And Hospital . Jabalpur *Corresponding Author

ABSTRACT Acharya Sushruta is one of the most pioneer scholars in the field of Shalya Tantra (Surgery). Acharya Sushruta in Sharirsthan has given the anatomical position of various structures. He was the first person in the field of Ayurveda, who had defined the clinical importance of structural components of body like Sira, Dhamni, Snayu,Kandara, Rajju, Jalaetc in detail. Snayu is also one of them. Acharya sushruta has described about the formation of Snayu in Garbha which strongly support the concept of formation of ligaments/tendons/aponeurosis according to principles of modern medical sciences. As he has described in the 4th chapter of Sharir Sthana, formation of Snayu in foetus is the result of the Khar Paka of Meda Dhatu by Teja (Pitta) of the Garbha which present throughout the foetal development1. Due to dominancy of Parthiva Guna, Snayu achieve the characteristic of hardness. In the fifth chapter of Sharir Sthana, Acharya Shusruta has described the clinico-anatomical importance of Snayu from the surgical point of view. He has put his view by making the resemblance of body with a boat[2]

KEYWORDS : Dhamn ,kandara, Rajju, Jala

INTRODUCTION

- The role of Snayu as structural constituent and as a vital part is well described in Sushruta Samhita and its various commentaries. Acharya Sushruta has only toldabout the number and types of Snayu. While there is no further detail description about positioning, articulation, applied anatomy and clinical significance of Snayu given by him, while the role of Prathu Snayu in stabilizing the joints as per concept of modern medical sciences is very important.The title of my thesis i.e. ***A Critical Study of Prathu Snayu as described in Shushrut,*** has high concern with the anatomy of ligament/tendon/aponeuroses because of their structural and functionalsimilarity with Prathu Snayu.

AIMS AND OBJECTIVES

1. A conceptual study and identification of the specific structure as Snayu based on cadaveric dissection.
2. To reveal the structure of four types of Snayu on the basis of cadaveric dissection.
3. To find out the exact number of Prathu Snayu present at the different level of body as mentioned in Ayurvedic and Modern medical sciences.
4. The correlation of Prathu Snayu with new concept of ligament, tendons, fascia, retinaculum, aponeurosis etc. on the basis of its structure, functions and applied anatomy in present scenario.

MATERIALAND METHODS

1. **Literary Study -** This will be conducted with the help of vedic and other classical literature presented in different books of Ayurveda and other relevant sanskrit literature of ancient India along with modern medical literature.
2. First of all vedas will be taken up and studied the collect literature concerning to snayu. Similarly Puran, Brahman granth, Upanishad, Darshan will be consulted. Literature will also be collected from Brihattrayi and Laghuttrayi samhitas particularly throughly studies and the literature concerned to the topic will be collected.
3. To conduct this study the literature above will be collected from library of Major S.D. Singh Ayurvedic Medical College, Farrukhabad, other researcher's view, relevent medical journals, magazine and internet.
4. **Cadaveric Study -** Some of Prathu snayu (Ligament) has been described in Ayurvedic literature but their detailed structure and approach in human body will be explored by the dissection of cadaver in dissection hall of department of Rachana Sharir, Major S.D. Singh Ayurvedic Medical College, Farrukhabad.

DISCUSSION

The definition also proves the concept of Ayurveda that the Snayu which are strong cord like structure made up of fine fibres, helps in binding the body parts together, are known as ligaments. Acharya Sushruta has also recommended some material to be used in suturing the raised margins of the Vrana. The Snayu fibres have also been included in this list; therefore it emphesises that Snayu are the fibre like material which can be used for suturing purpose in place of thread. Acharya Sushruta has also recommended that the Snayu should be protected along with other vital structure like Marma, Sira, Sandhi etc., where it becomes necessary to perform surgery.

In Sushruta Samhita the Snayu is classified in four types-

- Pratanvati Snayu
- Vritta Snayu
- Sushira Snayu
- Prathu Snayu

The Prathu Snayu is found to be present in Parshva, Uras, Pristha and Shir regions. According to Dr. Ghanekar the Prathu snayu are flattened or ribbon shaped tendons or aponeuroses. Acharya Damodar Sharma Gaur has also mentioned Prathu Snayu as flattened or expanded fibrous sheets like lumbodorsal fascia, Galea aponeurotica and other aponeuroses. So these aponeuroses are concerned to flat sheets of densely arranged collagen fibres. They are frequently striated. The large fasicles of collagen fibres are being separated by loose inter fascicular connective tissue. The aponeuroses usually consist of several layers. In the earlier context the term aponeuroses is applied for any tendon and neuron used discriminately for tendons and peripheral nerves. The term is now more widely used for any broad sheet of the connective tissue associated with the attachment of muscle. Sometimes the whole attachment is aponeurotic. The biggest example of aponeuroses is galea aponeurotica or epicranial aponeuroses covering the upper part of the cranium. It forms a continuous fibro muscular sheet with the epicranious, extending from nuchal line to the eye brows.Thoracolumber fascia can be taken for the example of Prathu Snayu. It is situated in the Pristha Bhaga and covers the deep muscle of the back of the trunk. The thoracolumber fascia in the thoracic region is a thin fibrous lamina that covers the extensor muscle of the vertebral column. It is attached medially to the spines of the thoracic vertebrae and laterally to the angles of ribs. This shows that thoracolumber fascia does the work by connecting the spines of thoracic vertebrae to the angles of the ribs and holds them in position similarly in the lumber region. Another example of aponeuroses is inguinal ligament which connect two bony parts and forms the lower boundary of the abdomen; it is convex downwards, extends towards the thigh and becomes continuous with the tensor fascia lata.The conjoint tendon is formed by the aponeuroses of the internal oblique and transverses abdominis muscles. It is inserted in the crest of the pecten of the pubic and is directly continuous with the anterior wall of

the sheath of the rectus abdominis.

This show that Prathu Snayu which is mentioned by Acharya Sushruta to be present in Parshva, Uras, Prishtha etc. regions are some special form of fascia or aponeuroses either entirely or as a part of the muscle.

REFERENCES

1. *मेदसः स्नेहमादाय सिरा स्नायुत्वमाप्नुयात द्य सिराणां तु मृदुः पाकः स्नायूनां च ततः खरः द्यद्य*(**Su.Sha.** 4/29)
2. *नौर्यथा फलकास्तीर्णा बन्धनैर्बहुभिर्युता द्य मारक्षमा भवेदप्सु नृयुक्ता सुसमाहिता द्यद्य* (Su. Sha. 5/41)