

A REVIEW ON SNAYU (NERVOUS TISSUE) BASED ON ITS FUNCTIONAL ASPECTS

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ABSTRACT

Snayu are the structures present in human body which has a close relationship with the functional element *vata* (*vata dosha*). The classification of *Snayu* is based on its structure, function and specific location. The injury to *Snayu* is very much painful because pain is the attribute of *Vatadosha*. While doing surgical as well as para surgical procedures a surgeon should be very careful in protecting these structures. The concept of *Snayu Marma* (vital points) also identifies the importance of these structures which are to be protected. Clinical manifestations like *Gru-drasi*, (*Sciatica*) *Pakshaghata* (paralysis) etc are due to the impairment in functional aspects of *Snayu* along with other structures like *Sira* (vascular structure) and *Kandara* (one type of *Snayu*-ligaments or tendon). In the present era of globalization and fast life the diseases affecting the *Upadhatu Snayu* (subsidiary body elements) are increasing, and this is becoming a challenge to the health professionals.

Keywords –*Snayu*(nervous tissue), *Kandara*(tendon or ligaments), *Marma*(vital points), *Vata*.

INTRODUCTION

The classification of various tissues, organs, systems etc in human body is based on structure, functions and locations. Ayurveda also defines and classifies the structures present in the human body. The anatomical, physiological, and pathological understanding of any structure is very much essential for prevention as well as treatment of diseases related to that structure. *Snayu* is one among such structure which has been classified into mainly four types based on its structure, function and location. They are *Pratanavathi snayu* (spreading), *Vrithas-nayu* (round), *Pruthu Snayu* (flat and thick) and *Sushira Snayu* (porous)⁽¹⁾.

PHYSIO-ANATOMICAL UNDERSTANDING OF SNAYU

Snayu is described as ‘*Vaatavahini Nadi*’(structure carrying *Vata*)⁽²⁾. They are of four types.

- *Pratanavathi Snayu*- present in all extremities and all joints and can be considered as branched.
- *Vrutha Snayu*-they are circular in shape and are known as *Kandara*.
- *Sushira Snayu*- they are porous in nature and are found in the end of stomach, intestines and urinary bladder.
- *Pruthu Snayu*- they are flat in nature and are present in sides, chest, back and head. Based on their distribution in the *Shadanga* (six body parts) of human body they are mainly 900 in number. Among these 600

are present in the extremities, 230 in the trunk and 70 above towards neck⁽¹⁾. Just as a boat consisting of planks becomes capable of carrying load of passengers in river after it is tied properly with bundle of ropes, all joints in the body are tied with *Snayu* by which persons are capable of bearing load⁽¹⁾. The injury to *Asthi* (bones), *peshi* (muscles), *sira* (vascular structure), and *Sandhi* (joints) may not be as severe as to *Snayu*⁽¹⁾.

A surgeon should have a clear cut idea about the *Bahya* (external) and *Abhyantara* (internal) *Snayus* for extracting the foreign body without causing harm to the *Snayu*⁽²⁾. The *Moolasthan* (root) for 900 *Snayus* are mentioned as *Masthulunga* (brain)⁽³⁾. *Maamsa* (muscles), *Kandara* (tendon or ligaments) and *Sira* (vessels) are considered as the *Saara* (essence) of *raktha* (blood) *dhatu* whereas *Asthi*, *Snayu* and *Sandhi* are the *Sara* of *Medhodhatu*⁽⁴⁾. *Snayu* is considered as the *Upadhatu* (subsidiary) of *Medhodhatu*⁽⁵⁾. While explaining the *Dheerghayulakshana* (long life) one feature is that the *Sira*, *Snayu* and *Sandhi* should be properly covered and it should not be visible externally⁽⁴⁾. *Asthi* is the most deeply seated structure in the body. To it *Snayu* is binded, and these are covered by *Mamsa*. All these get nourishment from *Sira*. Above all these are covered and protected by skin⁽³⁾.

CONCEPT OF SNAYU MARMA

Marma are the vital points in the human body where there is the location of *Praana* (life). These points are the conglomeration of *Mamsa*, *Sira*, *Snayu*, *Sandhi*, and *Asthi*. There are 107 *Marmas* in the human body. Of these there are 27 *Snayumarma*. They are four *Ani*, two *Vitapa*, two *Kashadhara*, four *Koorcha*, four *Koorchasira*, one *Basthi*, four

Kshipra, two *Amsa*, two *Vidhura* and two *Utkshepa*⁽⁶⁾. The four types of *Sira* (*vata*, *pitta*, *kapha* and *rakthavaha*) are specifically located in these *Marma* and are nourished. Injury to all these *Snayumarma* leads to *vaikalya* except *kshipra*, *basthi* and *utkshepa*. Mainly convulsive disorders, severe pain, stiffness, disabilities, feeling of discomfort in all situations and even death may result in injury to *Snayumarma*⁽⁷⁾.

CLINICAL MANIFESTATIONS

Snayu is considered as the structure which comes in *Madhyamarogamarga* (middle route for diseases)⁽⁸⁾. When *Vatadosha* get aggravated in *Snayu* *Grudrasi*, *Ayama* (bending), *Kubjatha* (short stature), *Sthambha* (stiffness), *Akshepana* (convulsions)⁽⁹⁾ etc are the results, and *Kaphadosha* in *Snayu* results in pain in *Sandhi* (joints)⁽¹⁰⁾. In many diseases like *Pakshaghatha* (paralysis), *Viswachi*, *Khanja*, *Pangu* (lane), *Kushta* (skin diseases) etc there is the involvement of vitiation of *Dosha* either in *Snayu* or *Kandara* along with other structures like *Sira*. In treatment aspect, whenever there is *Athisthambhana* there will be *Snayusamkocha* (stiffening), and *kampa* (convulsions)⁽¹¹⁾. Whenever the foreign body (*Salya*) is located in *Snayu* there will be severe pain along with stiffness⁽¹²⁾. While doing the *Sastra karma* and *Agni karma* (cauterisations) the surgeon should be very careful in protecting *Marma*, *Sira*, *Snayu*, *Dhamani* (blood vessels) and *Sandhi*⁽¹³⁾. *Dhahanopakarana* (materials used for cauterisations) mentioned for diseases of *Sira*, *Snayu*, *Asthi* and *Sandhi* are *Kshoudra* (honey), *guda* (jiggery) and *Sneha* (oil or ghee), and also *Dhahana* of *Mamsa* will pacify the *Vata* in those structures⁽¹⁴⁾. In the

concept of *Vishavega* (stages of toxicity) Alambhayana has considered *Snayu* as the location of *Visha* in 4th *Vegavastha*⁽¹⁵⁾. One among the *VranaVasthu* is *Snayu* (seat of wound)⁽¹⁶⁾. The *Srava* (oozing) of *Vrana* in *Snayu* is similar to mucous mixed with blood and thick in consistency⁽¹⁷⁾. In *Dushtavrana* (infected wound) involvement of *Snayu* is mentioned. The *Vrana* (wound) will be *Sukhasaadhya* (easily curable) only if there is no involvement of *Sira*, *Snayu* and *Sandhi*.

DISCUSSION

As the structure *Snayu* is defined as *Vatavahanaadi*, it may be the reason why injury to this structure leads to severe pain than any structure in the body. The reason for this can be considered as pain is mainly due to vitiation of *Vata*. Without *Vata* there is no pain⁽¹⁸⁾. Various types of pain like churning, crushing, pricking etc are due to *Vatadosha*. Since *Vata* is responsible for maintaining life the structure which holds *Vata* should be protected with much effort. While doing surgical procedures these structures should be given much importance. Since *Marma* is the seat for *Prana* (life) for pain free long life these structures should be protected. *Vata* is responsible for almost all deformities in the body. While considering most of the diseases related to *Snayu* there is involvement of *Vatadosha*. *Utkshepamarma* is one among the *Snayumarma* which has *Vayumabhotha* predominance, and this is the reason why it becomes *Visalyaghna* in nature. *Pranavata* which is located in *Shira* (head) may be travelling through these structures throughout the body may be the reason why *Masthulunga* is considered as the *Moolasthan* of *snayu*. The types men-

tioned are mainly for the better understanding of structural entity of *Snayu* based on location and functions and importance of protecting them while doing *Sastrakarmas* (surgical procedures) on those areas.

CONCLUSION

Snayu are the structures present in the human body which has a close relation with *Vatadosha*. It is one among the *Upadhatu* which helps the *Dharana* (maintainence) of body. *Snayumarma* are those specific locations in the human body which has predominance of *Snayu* component. The study of human body structures is very much essential for preventive as well as curative measures. The importance of *Shareera Sthana* has been described as to understand the *Shareera* for *bhishak* and *yogi*. Knowledge of *Snayu* is very much essential for surgeons as well as physicians who are mainly dealing with *Shalya* (foreign body) and vitiation of *Dosha* in *Dhatu* and *Upadhatu* respectively.

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