

A REVIEW OF SHRUNGATAK MARMA ACCORDING TO AACHARYA SUSHRUT INCORRELATION WITH MODERN ANATOMY

Krupali Diwakar Wanare^{1*}, Vinod Choudhari² and Shilpa Vrade³

¹M. D. (Ayu.) Scholar, 3rd year, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra.

²Professor and HOD, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra.

³Asso. Professor, Department of Rachana Sharir, Shri Ayurved Mahavidyalaya, Nagpur, Maharashtra.

Article Received on
21 March 2022,

Revised on 11 April 2022,
Accepted on 01 May 2022

DOI: 10.20959/wjpr20225-24008

***Corresponding Author**

Krupali Diwakar Wanare

M. D. (Ayu.) Scholar, 3rd
year, Department of
Rachana Sharir, Shri
Ayurved Mahavidyalaya,
Nagpur, Maharashtra.

ABSTRACT

According to ayurveda human body consist everything that exist in universe. As universe have its own energy points similarly human body also consist vital points called as marma. There are 107 marma (vital points) are describe in Ayurved samhitas. Shrungatak marma belongs to sadyapranahar and Urdhvajatrugat marma. Its effect of injury and location shows how important and essensetial to have knowledge of anatomical aspect as will as clinical aspect of this marma to a doctor and most importantly to surgeons. It is anatomically corelate with cavernous sinus and inter cavernous sinus. The ancient panchakarma procedure called Nasya karama is also related to this shrungatak marma.

INTRODUCTION

“Yat pinde tat bramhandi.”

According to ayurveda human body consist everything that exist in universe. As universe have its own energy points similarly human body also consist vital points called as marma. There are 107 marma (vital points) are describe in Ayurved samhitas. According to Aacharya Sushruta where maunsa (muscles), sira (vessels), Snayu (ligaments) asthi (bones), sandhi (joint) these 5 structures unite, such site is called as marma. And prana is situated at this site.

When injury happens to this site it effects and destroys functioning of all senses, mind and body.^[1] In present era it is observed that the injuries on these areas produce temporary or permanent, structural or functional deformity even after best treatment.^[2]

These 107 marma are as follow:^[3]

1. Shakhagat marma (4 limbs) 11 in each = 44
2. Uraha and udaragat marma (thorax and abdomen) = 12
3. Prushtagat marma (back) = 14
4. Urdhawajatrugat marma (head and neck) = 37

Again they are divided into 5 type according to of abhigataj (injury) or we could say effect of injury.^[4]

1. Sadyapranahar 19
2. Kalantarpranahar 33
3. Vishalyaghna 3
4. Vaikalyakar 44
5. Rujakar marma 8

They are also divided according to Rachana/ anatomical structure: Mansa (muscles) - 11, sira (vessels)- 41, snayu (ligaments) -27, Asthi (bones) - 8, sandhi (joints) - 20.^[5]

Review of literature

According to aacharya sushrut if any injury occurs at the site of sadyapranahar marma the person will immediately die or death occur within 7 days.^[6] Sadyaparanahar marama are Agni mahabhut Pradhan.^[7] There is sudden decrease in Agni mahabhuta In effect to the injuty of sdyapranahar marma. Agni mahabhuta denotes Rakta dhatu (blood) in body. i.e. severe blood loss leads to death.^[8] When injury happens at marma point vata dosha is vitiated due to severe blood loss. It leads to severe pain, body numbness and patient gets unconscious. Injury to marma point causes fatal damage.^[9]

So, for doctors it is very important to have deep knowledge about marma, its type, its sthana (location), and anatomical structures situated there. And specially surgeons shound be extra carefull while removing foreign body from any marma point.^[10]

Sadyapranahar marma are total 19 and there names are as follow:^[11]

Adhipati- 1, Shrungatak -4, Shankha- 2, Kanthasira/ Matruka -8, Hriday-1, Nabhi -1, Basti -1,

Guda -1.

Shrungatak marma

It is urdhvajatrugat marma i.e. it is anatomically situated in head region. It is also a type of sadyapranahar marma i.e. injury to this marma can lead to immediate death or death in 7 days. This marma comes under type of siramarma. because It is constituted by joining of various sira i.e. vascular entity. These sira nourishes the akshi (organ of vision), grana (organ of smell), jivha (organ of taste), shrotra (organ of hearing). That means the blood vessels and nerves related to 4 sense organs.^[12] That shows how important this marma is.

These are four in number,^[12] also it measures 4 anguli in pramana. (8cm)

One of the popular classical panchakarma treatment nasya-karma is related to this site. When the medicines reach to shrungatak marma by nasya-karma the vitiated doshas in 4 sensory organ are expelled out. Helps to cure diseases related to these 4 sense organs.

Anatomical structures related to shrungatak marma: are confluence of cavernous sinus and inter cavernous sinus situated in base of skull^[13]

Cavernous sinus

They are venous channels present in cranial dura. It is part of one of the Intracranial dural venous sinuses. This sinus is paired in structure. It is 2cm long and 1 cm wide. It is large venous space situated on either side of the body of sphenoid and sella turcica, in the middle cranial fossa. Its interior is divided into a number of small spaces/ caverns by trabeculae. The floor is made up of endosteal layer, while lateral wall, roof and medial wall by meningeal layer.

Relations

Superior: Optic chiasma, Optic track, Internal Carotid artery Inferior: Foramen lacerum, Greater wing of sphenoid bone. Medial: pituitary gland, Sphenoid sinus,

Lateral: Temporal lobe, Trigeminal ganglion Anterior: Sup. Orbital fissure, Apex of orbit.

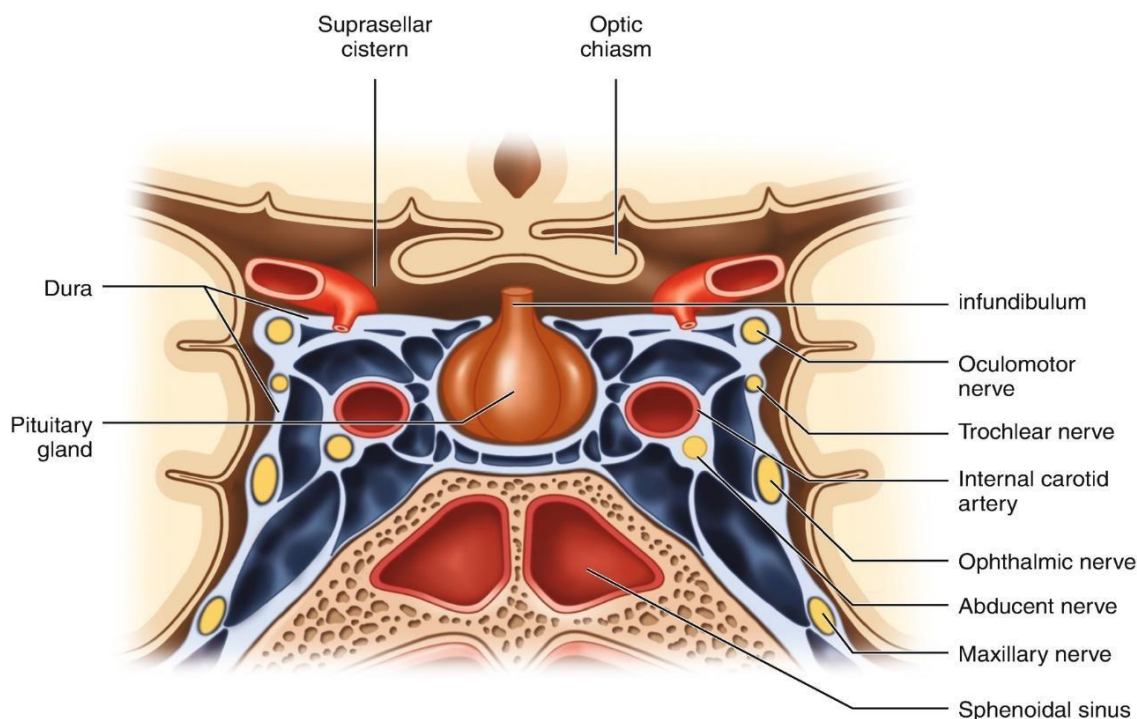
Posterior: Midbrain, Apex of petrous temporal bone.

Structures present from above downwards in lateral wall of sinus Oculomotor nerve, Trochlear nerve, Ophthalmic nerve, Maxillary nerve

Structure passing through cavernous sinus Internal carotid artery, Abducent nerve.

Cavernous sinus receives blood from three sources; orbit meninges and brain. i. e. superior

ophthalmic vein, inferior ophthalmic vein, central vein of retina, sphenoparietal sinus, ant. Of middle meningeal vein, superficial middle cerebral vein, inferior cerebral vein.^[14]



Inter cavernous sinus

It can be located anterior and posterior to the pituitary gland. This structure connects pair of cavernous sinus across the midline.^[15] and by connecting them they form circular venous circle around the pituitary gland. The presence of inter cavernous sinus is highly variable mostly found that ant. Inter cavernous sinus is larger than post. Inter cavernous sinus.^[16]

Clinical aspect

- One of the classical panchakarma treatment Nasya-karma is related to this site. When the medicines reach to shrungatak marma by nasya-karma the vitiated doshas in four sensory organ are expelled out. Helps to cure diseases related to these four sense organs.
- Cavernous sinus thrombosis causes signs and symptoms as follow.
Severe pain in eye and forehead due to involvement of ophthalmic nerve. Ophthalmoplegia due to involvement of 3rd 4th and 6th cranial nerve.

Oedema of eyelids due to congestion of ophthalmic vein.^[17]

- If the internal carotid artery is ruptured in the fracture base of skull. Arteriovenous

communication is established between artery and cavernous sinus. Consequently, arterial blood rush into sinus enlarging it and forcing blood into connecting veins. Causes opthalmoplegia or pulsating exophthalmos or marked orbital and conjunctival oedema due to raise in venous pressure.^[17]

- Cavernous sinus aneurysms: unlike intracranial aneurysms in other anatomic locations, carotid-cavernous aneurysms do not involve a major risk of subarachnoid hemorrhage. Their rupture can lead to direct fistulas can cause cerebral hemorrhage. Such patients suffer minor disability and do not require treatment.^[18]

REFERENCES

1. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 69: 6 - 16.
2. Priyanka mane, Jayavant Kharat; Conceptual study of Urdhvajatrugat Marma, 2020; 7: 3.
3. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 67: 6 – 5.
4. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 68: 6 – 8.
5. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 67: 6 – 3.
6. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 71: 6 – 24.
7. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 70: 6 – 17.
8. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 70: 6 - 17.
9. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 71: 6 - 20.
10. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 71: 6 - 21.
11. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 69: 6 – 9.
12. Dr. Ambikadatta Shastri; Sushrut Samhita Ayurvedtatvasandipika purvadha; Sharirsthana Chaukhamba Sanskrit Sanstahn, 2014; 75: 6 – 28.

13. Dr. sanjeevani Jadhav; study of shirogat avedhya sira and marma w.s.r. to Adhipati and shankha as avedhyasira and sadyapranahar marama; European Journal of Molecular and clinical Medicine, 2021; 8: 01.
14. Vishram Singh; Text book of anatomy head, neck and brain; Elsevier RELX India pvt. Ltd, 2019; 325.
15. Vishram Singh; Text book of anatomy head, neck and brain; Elsevier RELX India pvt. Ltd, 2019; 326.
16. Henry Gray; Warren H. Lewis; Anatomy of human body; LEA & FEBIGER philidelphia, New York, 1918; 20: 659.
17. Vishram Singh; Text book of anatomy head, neck and brain; Elsevier RELX India pvt. Ltd, 2019; 326.
18. Kulkarni BG and Kanthi GM; srungatak marma and its vulnerability a review; Int. J. Adv. Res, 5(4): 628-634.