

## CRITICAL APPRAISAL OF SIRA MARMA WITH SPECIAL REFERENCE TO VIDHURA MARMA

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### ABSTRACT

Marmas are the points which lie in our whole body. According to Ayurvedic literature at these points, the Prana (Jivaniya Shakti/ Vital energy) situated naturally. Acharya Sushruta (Ayurvedic, surgeon of an ancient period) has described very nicely in the separate chapter known as Marma Sharira in Sharira Sthana. The science of Marma was extended by the physician and surgeons of ancient period to prevent death. A basic concept of Marma and concept of Chakras in Yoga and meridian system in acupressure /acupuncture resemble with each other closely. Marma can be viewed as the meridian points system of Ayurveda, that corresponding to visceral organs, a combination of vast structures i.e. nerves, artery, veins, bones and their joints and interconnected bodily systems. Description of Vidhura Marma by Acharya Vagbhata has been done under Dhamani Marma, belongs to head region the most dangerous region of the body prone to deadly injuries. Anatomical structures may involve in this are the tympanic membrane, vestibulocochlear nerve, stylomastoid artery, facial nerve, mastoid air cells etc. Any sharp injury at this level causes permanent deafness.

**KEYWORDS:** Vidhura Marma, Facial Nerve, Vestibule-Cochlear Nerve, Stylomastoid Artery

### INTRODUCTION

Marma is the vital areas of the body where Prana lies. The word Marma comes from Sanskrit origin word 'Mri' meaning death. The Sanskrit phrases, 'Marayatiti Marmani', that places that are fatal to injuries are Marma points<sup>1</sup>. In Siddha system of medicine, they are called Varma Marma in Sanskrit means hidden or secret. By definition, a Marma point is a junction in the body where two or more types of tissues meet, such as muscles, veins, ligaments, bones or joints. Word Marma means "Marman" i.e., mortal point, sensitive point, weak vulnerable point. In the Earlier era, this science of Marma was more developed in wars where warriors used to achieve their target point for destroying mortal points, i.e., Marmas of enemies. To explore the knowledge of Marmas in clinical fields, it is necessary to know the actual structures present at those sites. The direct understanding of these Marma in ancient science was evident, but there were no sufficient techniques to make out their original structural aspect involved<sup>2</sup>.

During ancient times, knowledge of Marma was known to kings and warriors. It was applied in battlefields to hit and achieve the maximum lethal effect on enemies. This science was used both in warfare and surgery. From common ailments to serious neuromuscular diseases, all can be treated by Marma therapy. Marmas have been classified into six

categories according to their character/chief tissue involved in formation of particular type of *Marma* as *Mansa Marma* (muscular vital point), *Sira Marma* (vascular vital point), *Snayu Marma* (ligament vital point), *Asthi Marma* (vital point of bone), *Sandhi Marma* (vital energy points of joint)<sup>3</sup>. Another classification of *Marma* is on the basis of after- effect of injury to *Marma* these are as follows *Sadhya Pranhar Marma* (causing sudden death), *Kalantar Pranhar Marma* (death after some time of injury), *Vishlyaghna Marma* (type of *Parinam*), *Vaikalyakara Marma* (causing deformity) and *Rujakar Marma* (causing excessive pain). *Vaikalyakara Marmas* are those points where injury or trauma causes structural & functional deformity definitely. There are differences in opinions among the masters about these classifications, some combining *Dhamani* and *Sira Marmas* and calling them *Marma* that are related to blood vessels<sup>4</sup>.

*Acharya Dalhan* has defined the *Marma* as “*Maryanti it Marmani*” i.e., it is the spot on the body surface where if any injury or trauma occurs, causes sudden death. So these points should be protected from any type of injury. *Arundatta* says that these are the vital points on which injury lead to *Marana or Maranasagrishya Dukh* (death) and *Marma* is the seat of *Prana* (life) which is constituted by confluence of *Mansa* (muscle), *Sira* (vein), *Snayu* (ligament), *Asthi* (bone) & *Sandhi* (joint). *Vagbhata* says that these are the points which are painful on the application of pressure & shows abnormal pulsation. Total numbers of *Marmas* described in *Samhitas* are 107. Description of 107 *Marmas* given in *Samhita* is being classified into 5 types on the basis of structural involvement in it<sup>5</sup>. Although each and every one of the elements which comprise the *Marma* as *Mansa* (muscles), *Sira* (arteries, veins, and nerves), *Snayu* (fibrous covering and ligaments), *Asthi* (bones) and *Sandhi* (joints) are present in the site of *Marma* but on the basis of predominance of any above elements *Marma* are categorised. As there is the predominance of tendons (*Snayu*) in *Vidhura Marma* so *Vidhura Marma* is described as *Snayu Marma* according to *Acharya Sushruta*. Due to the predominance of arteries and veins (*Sira* and *Dhamani*) *Vidhura Marma*, that's why *Vidhura Marma* is described under *Dhamani Marma* by *Acharya Vagbhata*. *Siras* are the chief conducting system of the body carrying body essences like *Vata*, *Pitta*, *Kapha* and pure blood are aligned to the *Marma* basis. Twelve *Prana* that are described by *Acharya Sushruta* are three *Sharirika Doshas* (*Vata*, *Pitta*, and *Kapha*), three *Manasika Doshas* (*Satva*, *Raja* and *Tama*), *Panchaendriya* (five sensory organs) and *Bhutatma (Chetana)*<sup>6</sup> and all the *Siras* are channels for the transportation of *Prana* and are distributed in the whole body constitute the structural and functional entities of the body. When a *Marma* is injured such as vessels and nerves are cut, causing excessive bleeding and leads to stagnant of *Prana* in the body and ultimately causes death. Due to obstruction of the flow of *Vata*, *Vata* gets vitiated and excites *Pitta*, bringing on various reactions which may be fatal. The effects on the body are in proportion to the *Marma* injury. If the impact on the *Marma* is not heavy, the artery may not be badly injured. *Vidhura Marma* is described under *Sira Marma* and during the description of *Avedhya Sira* (vessels which should not be punctured) instruction has been given to save it during surgical process<sup>7</sup>. *Acharya Sushruta* has described the position of *Vidhura Marma* and said that it is lying back of the ear pinna near to mastoid of the temporal bone and below to it. Any type of trauma at this site may cause *Badhiryam* (deafness) permanently. According to *Dalhana* *Vidhura Marma* is described under *Snayu Marma* and included in *Vakialyakar Marma* on the basis of after effect. *Vidhura Marmas* are two in number and *Ardha angular Pramana* (size is *Ardha angular*). *Vidhura Marma* as *Vaikalyakara Marma* is not fatal but causes permanent deafness<sup>8</sup>.

## DISCUSSIONS

On the basis of chief structure involvement, *Acharya Sushruta* considered *Vidhura Marma* under *Snayu Marma* and *Acharya Vagbhatta* has included under *Dhamani Marma*. But On the basis of the result of injury both *Acharyas* considered it under *Vaikalyakar Marma* it means the result of trauma causes temporary or permanent deafness<sup>9</sup>. It is located just behind and below to the auricle of the ear especially at the mastoid process and its size is around *Ardhanguli* (nearly 1 cm. in radius). Underlying structures stylomastoid artery and facial nerve are especially found at the site of this *Marma* passing through the stylomastoid foramen. *Vidhura Marma* is situated just posteroinferior to ear that's why trauma causes deafness. Structures included under *Vidhura Marma* are mainly posterior auricular nerve, vessels, bones, temporal muscles and joints<sup>10</sup>.

### Regional Anatomy<sup>11-12</sup>

*Vidhura marma* included following anatomical structures-

- The mastoid process as the part of the bone
- Seventh cranial nerve (7<sup>th</sup>) as nerve
- Stylomastoid artery as *Dhamani Marma* (artery)
- The tympanic membrane as *Snayu Marma* (thin fibrous structure)
- Structure of middle ear
- Vestibule cochlear nerve and its branches (8<sup>th</sup> cranial nerve or auditory nerve)

At remote level under the consideration of anatomical structures vestibulocochlear nerve and the mastoid air cells can also be included under this as these have the values in the development of complications. *Sushruta* has included in this most of the structures that are surrounded by the fibrous sheath as *Snayu Marma* i.e. Nerves which supply to ear and tympanic membrane. *Acharya Vagbhatta* describes the separate category of *Marma* i.e. *Dhamani Marma* which includes *Vidhura Marma*. Basically, deafness is of three types.

- Conductive deafness is the failure of sound waves to reach to the cochlea.
- Sensorineural deafness is the failure of production or transmission of action potential due to cochlear diseases, cochlear nerve disease or nerve to central communications.
- Cortical deafness is the bilateral or dominant posterior temporal lobe lesion. Its result is the failure to understand spoken language even though hearing is not interrupted<sup>13</sup>.

All of these types also depend on the action of nutrition. Nutrition is the base which is responsible for the structural and functional growth, development and also all the physiological aspects. Nutrition to all the structures all is supplied by the artery (*Dhamani*). In *Ayurveda*, these are described under *Sira*. *Dhamani* included within *Raktavahi Sira* that carries pure blood with full of nutritional values. A function of hearing is the function of the sensory organ which is directly connected to the brain having ingoing channels. Injury on the back of the ear leads to deafness. Normally injury can't directly affect the internal structures without involving the external and superficial structures firstly. Because normally incoming factor cannot approach to the internal structures of the hearing and since they are resulting to

deafness, what other factors may be behind the causation of deafness. Above observations could have probably inspired *Vagbhata* to think that there should be some artery supplying to the important organs of hearing passing the site of *Marma*. It is particularly because from outer side towards inner side only an artery can pass supply not the nerve. *Vagbhata* had no doubt as highly probing vision and analyzing grey matter, otherwise, such exclusive performance was impossible, *Dhamani* is the very important to structure which is almost developed to function for the supply of nutrients rich in *Prana* factor<sup>14</sup>. If an arterial supply of an organ is cut it will certainly result into loss of function of that organ, specifying to disability or otherwise because of severe loss of blood leading to death. This fact is very well suggestive to accept the value of a *Dhamani* under the anatomy of *Marma* and also as a whole to the significance of *Dhamani Marma* for which only *Vagbhata* can be given the credit. An applied anatomical aspect of *Vidhura Marma* has been done over the modern parameter by Nitin S. Madavi<sup>1</sup>, Priti R. Desai, Sandeep V. Iraqwar and published their effort with the heading of Validation of Traumatic Effect on *Vidhura Marma* through Modern Parameters - A Case Study. Through their work, they have tried best to establish the relation of exact anatomical structure related to *Vidhura Marma* at various scientific evaluating parameters<sup>15</sup>.

## CONCLUSIONS

On the basis of the critical review of the various literature and other brilliant scholars, it may be concluded that *Vidhura Marma* may be included under both the structures as *Snayu Marma* (fibrous membrane and ligament and 7<sup>th</sup>, 8<sup>th</sup> cranial nerve or auditory nerve) and *Dhamani Marma* (stylomastoid vessels). This is very surprising that without a sufficient infrastructure available during the ancient period for anatomical studies, how *Vagbhata* could observe an arterial structure under *Vidhura Marma* given a separate and better concept of *Vidhura Marma* than *Acharya Sushruta*. Even though his performance is very much suggestive to submit that since the trauma is coming from the outer side, and the important neural structures dealing with the function of hearing are located at the deeper level, therefore a trauma-involving some vessel-like structure i.e. stylomastoid vessels.

## REFERENCES

1. Bhaskar Govind Ghanekar, *sushrut sharir sthan, ayurved sandipika hindi vyakhya, 3rd edition 1997, meherchandre lakshamandas(sanskrit) 6/40:page no.200.*
2. Bhaskar Govind Ghanekar, *sushrut sharir sthan, ayurved sandipika hindi vyakhya, 3rd edition 1997, meherchandre lakshamandas(sanskrit) 6/44:page no.202.*
3. Bhaskar Govind Ghanekar, *sushrut sharir sthan, ayurved sandipika hindi vyakhya, 3rd edition 1997, meherchandre lakshamandas(sanskrit) 6/14:page no.185.*
4. Agase Shastri Kashinatha, *Atreya Brahmanya with Sayana bhasya, 1931; I-III.*
5. Kashinath Shastri, *Gorakhnath Chaturvedi. Charaka Samhita, Siddhi Sthana. Varanasi: Chaukhambha Bharat academy, 2004.*
6. Agnivesa, *Charak Samhita, Ayurveda Dipika Commentary of Chakrapani, Hindi translation by Kushavaha H.S., Chaukhambha orientalia, 4th Edition, 1994.*

7. Vagbhatavirachit Astanga Hyrdiya, Hindi commentary by Atridev gupt, *Nidana sthana (12/1) Chaukambha Publication Varanasi, 2009.*
8. Pradeep Kumar Pal, Neera Saini, V. N. Mishra and H. H. Awasthi, *Critical Analysis Of Lohitaksha Marma And Its Applied Aspect, ejpmr, 2017,4(12), 350-353.*
9. Bhardwaja Vinaya Shankar et al., *A study of Lohitaksha Marma with special reference to lower limb, www.irjponline.com, 2015; 6(2).*
10. Mishra J. N., *Marma and its management, Chaukhambha Orientalia Publishers, Varanasi, 2005.*
11. Mishra J. N., *Marma and its management, Chaukhambha Orientalia Publishers, Varanasi, 2005.*
12. Pathaka Ashutosh Kumar, *Anatomy of Marma Chaukhambha Orientalia Publishers, Varanasi, 2014.*
13. Chaurasia BD, *Human Anatomy, volume 2, CBS publisher's sixth edition, 2015.* 18. Gray's, *Anatomy for student, Churchill living stone, second edition, 2010.*
14. Channamallikarjun, Tiwari S.P., Murthy A. R. V., G. J. Patel *Ayurveda College & R. C, New V.V. Nagar, Anand, Gujarat, India, On the topic A Critical Review Of Vidhura Marma With Reference To The Significance Of Dhamani Marma published on IAMJ: Volume 1; Issue 5; Sept – Oct 2013.*
15. Nitin S. Madavi<sup>1</sup>, Priti R. Desai<sup>2</sup>, Sandeep V. Iratwar<sup>3</sup> *MGACH & RC, Salod (H) Wardha, Maharashtra, India, over the topic as Validation of Traumatic Effect on Vidhur Marma through Modern Parameters - A Case Study published on Volume – 2, Issue – 3, May – June – 2017.*

