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### Insight On The *Nabhi Marma* From Anatomical Aspect: A Systemic Review

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#### ABSTRACT: -

*Ayurveda* focussed mainly on the preventive aspect rather than curative in comparison to other systems of medicine. The concept of *Marma* in the *Ayurveda* is pioneer in science of traumatology, which has explored the vulnerable areas of human body. *Marma* play very important role in surgical procedure by avoiding injury to the adjacent vital point. Every individual must know about the vital parts of our body so that they prevent them from any type of injury. *Marma* defined as sites where there is conglomeration of *Mamsa*, *Sira*, *Snayu*, *Asthi* and *Sandhi*, *Prana*(life) resides naturally. In between *Amashaya* and *Pakvashaya* root of *Sira* is *Nabhi Marma*, which is responsible for *Sadyahpranahara* on trauma. It is *Sira Marma*. It is *Svapanitala* in *Pramana* or *Caturangula*. *Nabhi marma* extends from the superior mesenteric vessels appearing between the neck of the pancreas and the third part of the duodenum crossing its anterior surface in median plane (L3 vertebra) to the formation of inferior vena cava from common iliac veins (L5). This includes abdominal aorta as well as inferior vena cava.

**Keywords:** *Marma*, *Nabhi Marma*, *Prana*, traumatology, vulnerable areas



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## INTRODUCTION

*Ayurveda* focused mainly on the preventive aspect rather than curative in comparison to other systems of medicine. Though *Ayurveda* is the ancient stream of education; it doesn't get its original identity among other systems of healthcare available now-a-days. There are many reasons for this but mainly interpretation and correlation of terms of *Ayurveda* with modern terminology seeks deficiency to understand the contemporary sciences about the terms. Unless a complete knowledge of that particular term is not available, scholars or experts couldn't able to interpret and understand the meaning accordingly.

*Sushruta Samhita* is the best among the *Shalya* and *Sharira*. He described various terms and concepts regarding human body like *Asthi Sandhi Shadang Sharir, Marma* etc. *Acharya* explained the detail knowledge about *Marma* in *Sharira Sthana* of *Sushruta Samhita* in chapter *Pratyeka Marma Nirdesa Shariram*. The details of *Marma* are present not only in our scriptures but also in *Veda, Upanishad, Itihaasa* and *Purana*. The concept of *Marma* in the *Ayurveda* is pioneer in science of traumatology, which has explored the vulnerable areas of human body.

All the *Acharya* gives descriptions of 107 *Marma* in human body and classified them into five varieties on the basis of *Marma Vastu* (structure involved), five on the basis of *Parinama* (effect of injury), six on the basis of *Shadang Sharir* (location on the body). *Acharya Sushruta* explained the definition of *Marma*, various types of *Marma*, structure involved in it, location of the *Marma*, symptoms of *Marma Sthana* injury and its management.

Regional anatomy considers the organization of human body as segments or major parts based on form and mass. Applied anatomy provides knowledge of practical application of

anatomical knowledge for diagnosis and treatment. Presents life is very fast and furious causes so many injuries during accidents, sports, and may be during daily activities which lead in to severe pain, injuries, deformity or even death. To overcome these circumstances, we must know the vital parts of our body so that we take proper care to secure them from injuries. *Marma* play very important role in surgical procedure by avoiding injury to the adjacent vital point. Every individual must know about the vital parts of our body so that they prevent them from any type of injury. An adequate knowledge of anatomy and traumatology has been considered very essential for the exact study of site of *Marma*. *Vaidyah* who are well versed in anatomy of every *Marma* will never commit mistakes in treatment due to ignorance.

From anatomical intersections, *Marma* defined as sites where there is conglomeration of *Mamsa, Sira, Snayu, Asthi* and *Sandhi*.<sup>[1]</sup> *Vagbhata* included *Dhamani* also as *Marma Vastu*<sup>[2]</sup>.

### Classical aspect of Nabhi Marma<sup>[3]</sup>

It mean into a hole, a navel like cavity, centre point of anything. *Nah Bandhaney* that which is attached, otherwise that which is detached only very late. It is located between the *Amashaya* and *Pakvashaya*. It can be considered as origin of *Sira*. It is the *Ashraya* of all *Sira*.

Type (acc. to *Rachana*): *Sira*

Type (acc.to *Aghataja Parinama*): *Sadyah pranahara*

Type (acc.to *Parimana*): *Svapanita lakuncita sammitani*

Sign if injured: instant death

## MATERIALS AND METHODS

Classical literature, modern literature, books, thesis, journals articles, internet materials were reviewed for the topic and related information and references were collected and analyzed scientifically to determine the anatomical

aspect of *Nabhi Marma*.

## DISCUSSION

From energetic and vitality point of view, *Marma* is seat of life i.e. *Prana*. Injury on *Marma* points may lead to deformity, pain or death as the *Prana* is residing in these points or near its vicinity. *Marma* contains and controls the external trinity of humors (*Tridoṣa*), the internal trinity of essence (*Prana, Tejas, Ojas*), and the cosmological trinity of natural (*Prakriti*) attributes (*Guṇa: Tamas, Rajas, Satva*); hence the *Marmas* also contain the five elements called *Mahabhuta* from cosmological interpretations.<sup>[4]</sup> The *Marma* which are 4 *Angula* in *Pramana, Sadyahpranahara* and in the midline of body are high reservoir of *Prana* as compared to other *Marma* which are on extremities, smaller in *Angula Pramama*. (the breadth of one's own finger as 1 unit) One such centralized *Marma* is *Nabhi Marma*.

*Nabhi* means center part of a wheel. In between *Amashaya* and *Pakvashaya* root of *Sira* is *Nabhi Marma*, which is responsible for *Sadyahpranahara* on trauma. It is *Sira Marma*. It is *Svapanitala* in *Pramana* or *Caturangula*. Anatomical structures corresponding to this *Marma*<sup>[5]</sup>: Inferior and superior mesenteric nerve plexus, Inferior epigastric artery, inferior epigastric vein, Tendinous intersection of the recti muscles, Bifurcation of abdominal aorta, Small intestines, pancreas, duodenum Aponeurosis of external oblique, internal oblique and transverse abdominis, Caput Medusae.

The umbilical region contains duodenum, colon, small intestines, celiac artery or superior mesenteric artery; so far as the modern anatomy is concerned. The umbilical region is 9.5-cm in length. This is about four inches or 10 cm or four fingers according to modern science.

All penetrating injuries of the abdomen

are of course, potentially lethal, but the danger is not immediate unless there is associated major vascular injury. A gunshot wound that simultaneously penetrates both a major artery or vein and the colon is particularly lethal because of the contamination produced at the vascular repair site. When a major blood vessel is involved in the penetrating abdominal wound, immediate surgical exploration is indicated to control hemorrhage. Rapid bleeding, in associated injury from major blood vessels, causes all of the classical signs and symptoms of hypovolemic shock.

Abdominal injuries are emergencies in surgical field. Trauma of the different viscera along with great vessels and their mortality rate compels to conclude that the great vessels like abdominal aorta and vena cava in the umbilical region, are having high status of fatal results in spite of surgical intervention.

Duodenum with the pancreas due to close association with great vessels is highly vulnerable. This is also lying in the umbilical region. The critical view of abdominal review concludes, the great vessels of the abdomen in the umbilical region are highly fatal what so ever the surgical technique is adopted<sup>[6]</sup>.

The umbilicus is variable in position; in the young adult it, usually lies on a level with the disc between 3rd and 4th lumbar vertebrae.<sup>[7]</sup> As age advances, and in conditions of deficient tone of the abdominal muscles, it sinks to a lower position. It is also lower in the child because of the under developed condition of the pelvic region. It lies midway between the origin of the inferior mesenteric artery and the aortic bifurcation. The bifurcation takes places one inch below the umbilicus, and therefore in front of L4; whereas the artery arises one inch above the umbilicus, and therefore in front of L3, and there the duodenum crosses it.

The inferior vena cava begins in front of the 5th lumbar vertebra, below and to the right of the aortic bifurcation, where it is crossed

anteriorly by the right common iliac artery. The third part of the duodenum crosses the median plane and overlaps the origin of inferior mesenteric artery. The superior mesenteric vein and artery cross anterior to the third part of the duodenum in the root of the mesentery. The third part of the duodenum is about 10 cm long, begins at the right side of the lower border of third lumbar vertebra and passes from right to left, with slight inclination upwards, in front of the inferior vena cava and ends in the 4th part in front of the abdominal aorta. In the median plane (i.e. over the abdominal aorta) superior mesenteric vessels cross the anterior surface of the third part of the duodenum [7].

From the above discussion it is evident that the umbilical region extends from subcostal plane to the intertubercular plane. The subcostal plane passes from the third lumbar vertebra whereas intertubercular plane passes from the 5th lumbar vertebra. This means *nābhi marma* extends from the superior mesenteric vessels appearing between the neck of the pancreas and the third part of the duodenum crossing its anterior surface in median plane (L3 vertebra) to the formation of inferior vena cava from common iliac veins (L5). This includes abdominal aorta as well as inferior vena cava.

## CONCLUSION

*Sushruta* surgical observations and experience are appreciated well. *Marma* can be considered as an area with specific dimension in terms of *Angula Pramana* (the breadth of one's own finger as 1 unit). *Nabhi marma* extends from the superior mesenteric vessels appearing between the neck of the pancreas and the third part of the duodenum crossing its anterior surface in median plane (L3 vertebra) to the formation of inferior vena cava from common

iliac veins (L5). This includes abdominal aorta as well as inferior vena cava.

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## REFERENCES

1. Kaviraj Ambikadutta Shastri. *Sushruta Samhita*, Volume 1. Ayurved-tattva-sandipika, Hindi Translation. Varanasi: Choukhamba Sanskrit Sansthan. Edition 2014 Pg 69
2. Kaviraja Atridev Gupta, Vaidya Yadunandana Updhyaya. *Ashthanga Hridaya of Vagbhata Vidyotini*, Hindi commentary.. Varanasi: Chaukhamba Sanskrit Sansthan. Edition 2016pg 269
3. Kaviraj Ambikadutta Shastri. *Sushruta Samhita*, Ayurved-tattva-sandipika, Hindi Translation.. Varanasi: Choukhamba Sanskrit Sansthan. Edition 2014. Volume 1. Pg 73. M.Monier Williams. A Sanskrit English dictionary. Delhi: Motilal Banarsidass. Reprint 2011. Pg 535
4. Kaviraj Ambikadutta Shastri. *Sushruta Samhita*, Ayurved-tattva-sandipika, Hindi Translation. Varanasi: Choukhamba Sanskrit Sansthan. Volume 1. Edition 2014 Pg 77
5. B.D. Chaurasia's, *Human Anatomy*, Edited by Krishna Garg. 5<sup>th</sup> edition: 2010. Volume 2<sup>nd</sup> Lower limb Abdomen and Pelvis. page no. 211-215.
6. B.D. Chaurasia's, *Human Anatomy*, Edited by Krishna Garg. 5<sup>th</sup> edition: 2010. Volume 2<sup>nd</sup> Lower limb Abdomen and Pelvis. page no. 268-269.
7. B.D. Chaurasia's, *Human Anatomy*, Edited by Krishna Garg. 5<sup>th</sup> edition: 2010. Volume 2<sup>nd</sup> Lower limb Abdomen and Pelvis. page no. 270-271.