

A LITERARY REVIEW ON NABHI MARMA AND ITS ANATOMICAL IMPORTANCE

Dr. Anjali Panwar*¹ and Dr. Naresh Kumar²¹P.G. Scholar, P.G. Department of *Rachana Sharira*, Rishikul Campus U. A. U, Harrawala, Uttarakhand.²Professor & H.O.D., P. G. Department of *Rachana Sharira*, Rishikul Campus U.A.U, Harrawala.

*Corresponding Author: Dr. Anjali Panwar

P. G. Scholar, P.G. Department of *Rachana Sharira*, Rishikul Campus U. A. U, Harrawala, Uttarakhand.

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ABSTRACT

Marma Sharira is an important concept of *Ayurveda*. *Marma* are the point where *Mamsa*, *Sira*, *Snayu*, *Asthi* and *Sandhi* meets together. These are critical points of the body associated with different organs, nerves, muscles etc. *Prana* are situated in *Marmas*, injury to *Marma* can lead to *Vaikalya* (abnormalities) and death, so considered as vital points. Knowledge of position of *Marma* and *Marmabhighata* (injuries to vital points) symptoms produced is essential before performing any surgical treatment. It plays an important role in surgery hence, it is rightly called as *Shalya Vishayardha*. *Ayurveda* described us of *Marma* therapy for various disease. *Marma*, definition of *Marma*, types of *Marma*, and their *Vidhya Lakshana* are described by nearly all *Ayurvedic* texts, especially *Trimarmiya Siddhi*, *Trimarmiya Chikitsa* chapter in *Charaka Samhita*, *Marma Vibhaga* chapter in *Sharia Sthana*, *Marma Vibhaga* chapter in *Astanga Sangraha*, and *Shariravichaya Sharira* chapter in *Kashyapa Samhita*. *Aacharya Susruta* mentioned *Nabhi* as centre of all *Siras* and mentioned that *pranas* resides in *Nabhi*. *Nabhi* has a great anatomical importance. *Nabhi* is considered to be centre of all organs in the body. *Nabhi marma* is very important as it plays an important role in process like digestion, metabolism as well as absorption. *Nabhi marma* comes under *Sadhyapranahar Marma* and *Sira Marma* according to *Acharyaa Susruta*.

KEYWORDS: *Marma*, *Nabhi*, *Ayurveda*.**INTRODUCTION**

Charaka and *Susruta* mentioned *Nabhi* as a structure where *Pranas* are situated. Among the 107 *Marmas* *Nabhi* is included in *Sadhyapranahara Marma* and *Mamsa Marma* by *Susruta*.

REVIEW OF LITERATURE**NABHI STHANA (ANATOMICAL POSITION)**

According to *Ayurveda* *Nabhi* is situated between *Amasaya* and *Pakwasaya* in the *Udara* (stomach).^[1]

Position of umbilicus is variable but in healthy adults it lies at the level of disc between third and fourth lumbar vertebrae corresponding to the midpoint of the line joining the two anterior superior iliac spine.^[2]

Position of umbilicus is lower in infants.

EMBRYOLOGICAL IMPORTANCE OF NABHI

It is a meeting point of the four folds of embryonic plates. (two lateral, head and tail).

This is also the meeting point of three systems, namely the digestive (vitellointestinal duct), the excretory (urachus), and vascular (umbilical vessels).^[3]

NABHI AS PRABHAVASTHANA OF SIRAS

Nabhi is site of origin of *Dhamani* and *Sira*.^[4] *Sira* feeds

the foetus through *Nabhi* i.e. umbilical cord but after the birth these *Siras* do not exist so *Susruta* called them *Nabhiprabhava*. *Siras* originate from *Nabhi* such that they give appearance of spokes arising from the centre of wheel.^[5]

For lymphatics and venous drainage umbilicus acts as a watershed. Lymph and venous blood flows upwards above the plane of umbilicus, and downwards below this plane. These do not normally cross the umbilical plane.^[6]

Aacharya Susruta in *Sharira Sthana* chapter 3 explained that *Nabhi Nadi* remains attached to *Rasavaha Nadi* of foetus and carries nutrition from mother to *Garbha* (foetus).

NABHI AS A PITTA STHANA OR JYOTISTHANA

Pitta is one of the sites of *Pitta*. According to *Aacharya Susruta* *Vridhhi* of *Garbha* occurs due to *Rasa* and *Marutaadhamana*.^[7] *Nabhi* is also called as *Jyotisthana*. *Vayu* blows this *Jyoti Sthana* i.e. *Nabhi* due to which *Vridhhi* of *Garbha* occurs. *Vata* in combination with *Agni* spreads in *Srotasa* of *Garbha* and expands them.^[8] *Aacharya Dalhan* commented on the word *Maarutadhaman* by saying that “*Vata* entering *Srotasa* (*Sira*) of foetus and causes their dilatation, thus provides growth for development of foetus.”^[9]

NABHI AS A MAIN STRUCTURE OF GARBHA POSHANA

Vruddh Vagabhatta explained that when all *Anga* of foetus are developed, *Nadi* connect foetus to the *Apara*, which in turn is connected to mother *Hrudaya*. *Aahara Rasa* travels from mother's *Hrudaya* to foetus by passing through *Dhamnis* in *Apara* and then to *Nabhi*. After that it goes to *Pakwasaya* and there it is digested by *Agni* and nourishes all tissues.^[10]

NABHI AS CHAKRA

The *Chakras* are the seven wheels of energy in the body. The third *Chakra*, *Manipura Chakra* or also called as naval *Chakra*. It is situated in the region of *Nabhi*. The word *Mani* is described here in terms of *Agni*.^[11]

NABHI AS MARMA

Ayurveda described *Marma* with great importance as critical or vital points, injuries to them can cause serious effect even death. *Nabhi Marma* is one of the 107 *Marmas* described by *Aacharyas*. It is situated in abdomen at the level between L3 –L4 vertebrae. It comes under *Sadhyapranahara Marma*, if injury to *Nabhi Marma* occurs, it can lead to immediate death or death within 7 days. This is single in number. It is also described in *Mamsa Marma*.^[12]

SIZE OF NABHI MARMA

Aacharya Susruta described *Pramana* of this *Marma* as “*Swapanitalakunhitasamitani*” i.e. equal to one's own palm (4 *Angula*).^[13]

CLINICAL IMPORTANCE OF NABHI

Umbilicus (*Nabhi*) is one of the important sites of portocaval anastomoses. During portal hypertension these anastomoses open up.^[14]

DISCUSSION

- This article is an attempt to describe *Nabhi* as *Marma* and its clinical aspect in contrast with the modern by referring different *Samhitas* and modern textbooks of anatomy. By reviewing about different aspects of *Nabhi*, we come to the conclusion that *Nabhi* is structurally, functionally and pathologically is umbilicus.
- *Nabhi* is of great importance in our body. These following points show the vital importance of *Nabhi*.
- *Nabhi* is called as moola of *Sira* and *Dhamani*. *Nabhi* is also considered as originating source of vessels i.e. *Sira* and *Dhamani* present between *Aamashaya* & *Pakwasaya*. Anatomically no vessels are seen to be originated from *Nabhi* but it is an important site for portocaval anastomoses.
- *Nabhi* is considered as *Pitta Sthana* may be due to its proximity to digestive system. *Pitta* plays an important role in digestion of food. *Grahini* is also located in the area of *Nabhi* or *Pitta*, *Vikriti* of *Agni* leads to *Grahini Roga* which also shows that *Nabhi* is *Pitta Sthana*. *Gulma* is also due to *Vikriti* of *Agni*

& *Nabhi* is one of the sites of *Gulma Roga*.

- *Nabhi* is the main structure of *Garbha Poshana*. If we closely look at foetal circulation, blood vessels which carry nutrition from mother to foetus are present in umbilical cord. During foetal life *Nabhi* is the main source of nutrition and so survival of foetus. If due to any reason this circulation is impaired in foetus, foetus may be born with defects and deformity, stunted growth.
- *Nabhi* is considered as site of *Prana*. According to modern science oxygen is transported with the help of blood i.e. RBC. Oxygen is *Prana Vayu*, since blood is transporting agent of *Prana Vayu* and it circulates through *Nabhi* in foetal life. So it does *Jivan Karma*. According to modern science oxygenated blood is transported through umbilical vein from mother to foetus and enters to the foetus through umbilicus, so it is considered as *prana*.^[15]
- Umbilicus has a great clinical importance as it is an important site for portocaval anastomoses. During portal hypertension these anastomoses open up as dilated veins radiating from umbilicus called *caput medusae*.^[16] It also justifies the sentence that *Nabhi* is surrounded by *siras*.
- *Manipura Chakra* of the *Satchakra* is also situated in *Nabhi*, it is also called as solar plexus. *Coeliac plexus* largest autonomic plexus of the body is also called as solar plexus. It is situated in the centre of the body i.e. at umbilical level. Nerve fibres from *coeliac plexus* radiate in all directions through the major abdominal organs. *Coeliac plexus* is also called as abdominal brain due to its location and function. Injury to *coeliac plexus* can lead to paralysis of entire body or even death. It justifies that *Nabhi* is a vital point i.e. *marma* & its injury may lead to deformity and death.^[17]

Ghanekara also commented about *Nabhi Marma* that entire anterior abdominal wall is *marma sthal* because all essential organs are situated behind *Nabhi* that's why injury to *Nabhi* can lead to deformity and death.^[18]

CONCLUSION

Nabhi is considered an important structure in the body as *Sira* and *Dhamani* originate from it like spokes of a wheel arise from the centre. During the foetal life umbilical cord is attached to *Nabhi*. *Nabhi* is also considered as a vital point i.e. *Marma*. It is a *Sadhyapranahara Marma* & *Mamsa Marma*, injury to *Nabhi* leads to death immediately or within 7 days. *Nabhi* is also considered as site of *Prana* & it also acts as a watershed for venous and lymphatic drainage and also is an important site for portocaval anastomoses, that is why *Nabhi* has a great anatomical and clinical importance.

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