



Concept Of *Koshthanga* With Special Reference To *Nabhi*

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Abstract:

Nabhi is one of the many concepts in *Ayurveda* science which are not yet fully clear. In classical texts of *Ayurveda*, scattered references regarding *Nabhi* are available like *Nabhiis* mentioned as a vital spot (*Marma*), *Sira Prabhava* and *Pranayatana* of body. It is also included among the fifteen *Koshthanga* of body. *Nabhi* is present in between the *Pakvashaya* and *Amashaya* and dominant place of *Pitta Dosha*. Available literature and commentary on *Nabhi* interprets it as a Navel but practically it doesn't make a sense to stick with this interpretation. Therefore; it is needed to review classical texts of *Ayurveda* and contemporary literature to get clear and definite meaning of the word "*Nabhi*". After thoroughly reading and interpreting the literature available regarding *Nabhi*; it has considered as an important structure in the body and centre of all the organs of the body and core of physiological process.

Keywords: *Koshthanga, Nabhi, Pitasthana, Prana,*

Introduction:

Nabhi like each part of the body has its own importance, also considered to be the centre of all the organs of the body. Scattered references regarding *Nabhi* are available in classical texts of *Ayurveda*. Laying emphasis on importance of *Nabhi*, the anatomical, physiological as well as pathological concepts about *Nabhi* are described in *Ayurveda* classics.

Aim and objective:

- To understand concept of *Nabhi* in detail by review of literature.
- To understand their importance in *Sharir*.

Material and method:

- Review of *Ayurveda* literature including relevant commentaries.
- Other print media, online information, journals, books, magazines etc.

Review of literature:**Concept of Koshtha-**

According to *Kalpadrums*, the word *Koshtha* is formed by “*Kush Dhatu*” with “*Than Praty*.”

Meaning of *Koshtha* according to Apte and Monier William dictionary is a granary, a place in which grain is kept, a treasury, an apartment, the shell of anything, any enclosed space or area.

In context of *Sharir Rachana*, *Koshtha* is considered as a cage or cavity. Cranial cavity, thoracic cage/cavity, abdominal cavity, pelvic cavity

According to *Charaka*, *Koshtha* may also be called *Mahasrota*, *Sharir Madhya*, *Mahanimna*, *Amashaya* and *Pakvashaya*.¹

According to *Acharya Sushruta*, the site of *Agni*, *AamAna*, *PakwaAna*, *Mutra* and *Rudhira*, along with *Hrudya*, *Unduka*, *Fuffusa* are considered as *Koshtha*.²

Concept of Koshthanga:

According to *Parishadham Shabdarth Shariram*, *Madhyakaya Guha*, *Aanavaha Srotas*, *Antah Jathara* and all the *Sushir Koshthanga* can be considered as the *Koshtha*.³

Acharya Charaka and *Acharya Bhela* have mentioned 15 visceral structures. These are as follows: *Nabhi*, *Hrudya*, *Kloma*, *Yakruta*, *Pleeha*, *Vrukka*, *Basti*, *Purishadhara*, *Amashaya*, *Pakvashaya*, *Uttaraguda*, *Adharaguda*, *Kshudrantra*, *Sthulantra* and *Vapavahana*.⁴

The body as a whole is known as *Anga*, again it has six *Anga* (major parts) - the head, the trunk, two arms and two legs; *Netra*, *Nabhi*, *Pani* and *Pada* and such others are the *Pratyanga* (minor parts). According to *Acharya Indu* the part between the *Jatru* and the *Kati* is said to be the *Antradhi*; *Nabhi* and *Hrudya* are situated in this *Antradhi*.⁵

Ashtang Hrudya considers *Nabhi*, *Hrudya*, *Kloma*, *Yakruta*, *Pleeha*, *Vrukka*, *Basti*, *Fuffusa*, *Unduka*, *Dimba*, *Antra* as the *Koshthanga*.⁶

Acharya Kashyapa has used the word *Pratyanga* instead of *Koshthanga* and considers *Nabhi*, *Hrudya*, *Kloma*, *Yakruta*, *Pleeha*, *Vrukka*, *Basti*, *Purishadhara*, *Amashaya*, *Pakvashaya*, *Guda*, *Kshudrantra*, *Sthulantra* and *Vapavahana* as the *Pratyanga*.⁷

Concept of Nabhi:

According to *Kalpadrums*, The word *Nabhi* is derived from “*Nah Dhatu*” with “*Inh Praty*”.

The term is derived from word ‘*Nah - Bandhe*’. It means to bind or tie to the central point just like the spokes of wheel held at the navel.⁸

According to the Monier Williams dictionary, the word *Nabhi* has following meanings: The navel, to burst into a hole, a navel like cavity, the navel of a wheel, Central point, a chief point, *Kshatriya*, point of junction or origin

ParishadyamShabdarthShariram, has mentioned concept of *Bahir Nabhi* and *AntarNabhi*. The *BahirNabhi* is situated in the middle of the abdominal region on the sagittal plane. In the intra uterine life, the *NabhiNadi* containing the *Sira* and *Dhamani* is related to this part. The *Bahir Nabhi* is said to be a muscular part. The *AntarNabhi* is also related to *SiraDhamani* and *Peshimaya* (mascular) but is also *Pindikavartrupa*, *Pittadhishtana*, *Koshthangarupa*, situated between two *Ashya*, is one of the *Pranayatana*.⁹

Anatomical View:

Acharya Charaka, *Acharya Bhel* and *Vagbhata* include *Nabhi* in *Dasapranayatana*.

Acharya Charaka, *Acharya Sushruta*, *Acharya Kashyapa* and *Vagabhata* considered *Nabhi* in *Matrujabhava*.¹⁰

The *Amashaya* is situated in between *Nabhi* and *Stana*,¹¹

Describing the signs indicating the longevity of life of a new born; *Acharya Charaka* says that the baby having a slightly prominent or right curved Navel would have a longer life span.¹²

The place of *Nabhi* is *Udara* (abdomen) and it is present in between the *Amashaya* and *Pakvashaya*. It is the place of origin of *Sira* (*Siraprabhava*); injury to this leads to death.¹³

Sushruta has described that the *Prana* of an individual resides in the *Nabhi*; the *Nabhi* is surrounded by *Sira* similar to the axle hole being surrounded by spokes. *Nabhi* is said to be the *PrabhavaSthana* i.e., the site of origin of the *Dhamani* and *Sira*.¹⁴

Sira originating from the *Nabhi*, spread through the entire body, just like water spreads from the *Padaminikanda* (rhizome of the lotus plant) to its stalk.¹⁵

Dhamani are twentyfour; by them the entire body gets supplied with nourishment similar to a vast plot of land by canals carrying water; from them (*Dhamani*) the *Nabhi* (umbilicus) is surrounded just as an axle hole is surrounded by the spokes (of a wheel); at that umbilicus (centre) life is designed to dwell; hence it is seat of *Agni*.¹⁶

In *AngavibhagamShariramAdhyaya*, *Vagabhata* told that *Dhamani* originates from *Nabhi* and it is surrounded by *Dhamani*; similar to the axle hole being surrounded by spokes. These *Dhamani* spreads in the body upward, downward and obliquely and nourished the body.¹⁷

One *Peshi* is present in the umbilicus.¹⁸

Nabhi is a superficial regional landmark which helps in identifying the sites of various organs; like *Agnashaya* is situated above *Nabhi* and *pavanashaya* below it.¹⁹

Manipura Chakra or the *Nabhi chakra* is situated in *Nabhi* region. In this context the word *Mani* is used in the sense of *Agni*. Both *Mani* and *Agni* have *Tejas* property.²⁰

NabhiMarma is single in number, belonging to the abdominal region. On the basis of *AbhigatajaParinaam* it is *SadhyopranaharaMarma*. Any injury to this *Marma* may lead to immediate death or death within 7 days. On the basis of *RachanaNabhi* is *Sira Marma* and its *Pramana* is *Swapanitala* (4 *Angula*).²¹

Nabhi is considered as the *Sthana* of *UdanaVayu* by *Acharya Charaka* and as the *Sthana* of *SamanaVayu* by *Acharya Sharandhara*.²²

Physiological View:

According to *Charaka* foetus takes its nourishment through the *NabhiNadi* (umbilical cord). The *Nabhi* of the foetus is connected to the *Apara* by *NabhiNadi*. The *Apara* is in its turn connected with the *Hrudya* of the mother. The heart of the mother floods the *Apara* by the pulsating *Sira*. This *Rasa* promotes strength and complexion of the foetus.²³

Jyotisthana is present inside the umbilical of the foetus; when this is inflated by *Vata* combined with *Usma*, then the body grows; as and how the *srotas* becomes dilated spreading upward, side ward and downward the body of the foetus grows accordingly.²⁴

Nabhinadi of the foetus is connected with the *RasavahaNadi* of the mother, this cord conveys the essence of food and vitality from the mother to the foetus; and nourished by this material it grows.²⁵

Parasara said that *Nabhi* gets originated first & *Prana* is located there which helps in the growth of the body with the combination of *Ushma*.²⁶

Pathological view:

According to *Charaka* with commentary of *Chakrapanni*, Improper execution of the *Nabhinadi* may cause *Ayamottundita* (elevation of the umbilicus length wise), *Vyayamottundita* (elevation of the umbilicus in breadth), *Pindalika* (formation of a circular ring around the *Nabhi*), *Vinamika* (elevation of the umbilicus in the periphery and depression in the centre), *Vijrumbhika* (having recurrence of protrusion of the umbilicus). According to *Chakrapani* *Nabhipaka* is caused by *Pita*; *Vata* is responsible for *Ayamottundita*, *Vyayamottundita*.²⁷

According to *Sushruta* Vitiated *Vata* causes enlargement of umbilicus associated with pain is termed as *Nabhitundi*.²⁸

Discussion-

Anatomical point of view-

Nabhi as a *Prabhava Sthana* of *Dhamani* and *Sira* - Though, Anatomically we do not see any veins or arteries being connected or getting originated from the *Nabhi*. But the connectivity to the *Sira* is explained on the basis of foetal circulation. In intra uterine life, the umbilical cord containing one vein and two arteries enters the foetal body via *Nabhi*. Umbilical vein after enter into the body of the foetus goes upwards and divided into right and left branches. Porto-caval anastomosis, Umbilical veins and its branches and the umbilical arteries look like wheel in appearance at the *Nabhi*. This is relevant to the spokes of wheel example said by the *Acharya*; thus *Nabhi* is considered as the *Siramula*. At the time of birth of the child, its cardio-vascular system with network of veins and arteries and even lymphatic's will have fairly well developed. After the child is born the heart becomes the chief organ of both arterial and venous network. So after birth these *Sira* (Umbilical vessels) do not exist anymore.

According to *Yogashikhopnishada* the *Manipura Chakra* situates at *Nabhi*. This *Chakra* is anatomically considered as the celiac or solar plexus. The celiac plexus is the largest of autonomic nerve plexuses, also known as the solar plexus, because of its location in the centre of the body (at the level of umbilicus) where radiating nerve fibres extend in all directions to the important abdominal organs.

Nabhi or specifically the *Antarnabhi* is considered as a *Koshthanga*. *Nabhi* is surrounded by organs which lie in the *Koshta*, thus are called the *Koshtanga*; so, in accordance with the above, *Nabhi* along with surrounding structures i.e. *NabhiPradheshais* also considered as the *Koshthanga*.

Physiologically point of view-

Nabhi is a *Pitta Sthana* or *Jyothi Sthana*. *Nabhican* be considered as *Jyothi Sthanadue* to the proximity of the digestive organs with it. *Grahani* is situated at umbilical area or at *Nabhi*, which bears *Pittadhara Kala* and functions with the help of *Pitta*, the *Agni Tatwa* which is said to be representative form of *Pittain* the body. Thus *Nabhi* is closely related to *Agni* or *Pachakagni* in the body.

Nabhi is a main structure in *Garbha Poshana*. Navel is the root of circulation in intra uterine life, since, it is related to the umbilical vessels which connect the child and mother, and is the main gateway through which nutrition enters the foetus. If any defects of circulation system or blocks or inadequate nutrients from mother the foetus born with deformities and birth defects, stunted growth or intrauterine death, so umbilicus is very important structure in foetal life.

Nabhi is one of the *Pranayatana*. The *Prana* is supplied to the foetal body through *Rudhira*. It is the root of the body which sustains life. *Rakta* does the *Jivana Karma*. According to modern medical sciences, oxygen transportation is the function of blood. *Prana Vayu* can be considered as inspired oxygen during the process of respiration. As *Rakta* is the transporting agent of *Prana Vayu*. Oxygenated blood is carried by umbilical veins from placenta of mother to the foetus. These veins enter the foetus body through umbilicus. So *Nabhican* be considered as *Pranayatana*.

Nabhi being as a centre of *Agni*; or a dominant place of *Pachaka Pitta* and *Samana Vayu* perform the process of digestion through *Grahana* (consumption / selection), *Pachana* (conversion), *Vivechana* (separation) and *Munchana* (give up for next stage).

Pathologically point of view-

The umbilicus is one of the important sites at which left branch of the portal vein anastomose with vein of anterior abdominal wall (systemic) (porto-caval anastomoses) through the paraumbilical veins. In portal obstruction the veins around the umbilicus enlarge forming caput medusae.

Ayama, *Vyayama*, *Pindialika*, *Vinamika Vijrmbhika* and *Nabhitundi* in fact indicate different types of umbilical hernias.

Conclusion: *Nabhi* cannot be described as a pinpoint structure but an area which can broadly be considered as the umbilical region. In *Ayurveda*, anatomically and physiologically, *Nabhi* is an important *Kosthanga* as it is *Sthana* of *Agni* and also a *Pranayatana*.

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