

**International Journal  
of Ayurveda and  
Pharmaceutical  
Chemistry**



Volume 7 Issue 3 2017

[www.ijapc.com](http://www.ijapc.com)



**e ISSN 2350-0204**

Greentree Group



### ***Nabhi: The Centre of Prana***

B.M.N.Kumar\*

\*Dept. of Rachana Sharir, Faculty of Ayurveda, IMS, RGSC, BHU, Varanasi, UP, India

#### **ABSTRACT**

There are many concepts in *Ayurvedic* science which are not yet fully understood & *nabhi* is one of these concepts. In *Ayurveda nabhi* (navel) is considered as the originating source for vessels present in between the *pakvashaya* (intestines) and *amashaya* (stomach). These vessels are the nutrient passages and act as channels for showering sustenance to different parts of our body. Because of its intense importance all most all *acharyas* of *Ayurveda* has considered *nabhi* is an important structure in the body and centre of all the organs of the body.

#### **KEYWORDS**

*Sira, Prana, Umbilicus, Marma, Fetus*



**Greentree Group**

Received 20/09/17 Accepted 13/10/17 Published 10/11/17



## INTRODUCTION

Each part of the body has its own importance. *Nabhi* is a very important part among them. It is considered to be the centre of all the organs of the body. The description about *nabhi* is present in ancient system of medicine. The anatomical, physiological as well as pathological concepts about *nabhi* are broadly mentioned in *Ayurveda samhitas*.

## REVIEW OF LITERATURE

*Caraka* and *Sushruta* are considered *nabhi* as important structure in the body that contains *prana*<sup>1,2</sup>. *Caraka* and *Vagbhata* included *nabhi* in *dasapranayatana* and they considered *nabhi* is a *koshtanga*<sup>3,4</sup>. *Sushruta* was included *nabhi* in 107 *Marmas*. He said that *nabhi* is *sira Marma* and *sadya pranahara marma*<sup>5</sup>.

### A. *Nabhi sthana* (Anatomical Situation of *nabhi*)

The place of *nabhi* is *udara* (abdomen) and present in between the *amashaya* and *pakvashaya*<sup>6</sup>.

### B. *Nabhi* as a *prabhava sthana* of *sira*

*Nabhi* is said to be the *prabhava sthana* i.e., the site of origin of the *dhamanis* and *siras*<sup>7,8</sup>. In fetal life *siras* supply the nutrition to the fetus through *nabhi nadi* (umbilical cord)<sup>9-11</sup>. After birth these *siras* do not exist

anymore. That is why *Sushruta* has labeled them “*nabhi prabhava*”. Regarding relation of *siras* with *nabhi*; *Sushruta* has described that *siras* connected to the *nabhi* spreads all over the human body. The *prana* of an individual exists in the *nabhi* and *nabhi* itself is concerned with *prana*. The *nabhi* is surrounded by *siras* from all sides like spokes arising from centre of wheel. In *Sharira sthana* *Sushruta* has described that *siras* originating from the *nabhi*, spread through the entire body, just like water spreads from the rhizome of lotus plant to its stalk of the lotus flower<sup>12</sup>. In *Sharira sthana* 3<sup>rd</sup> chapter *Sushruta* said that the *nabhi nadi* remains attached to the *rasavaha nadi* of the fetus and this *nabhi nadi* carries *ahararasa virya* (nutrition) from the mother to the *garbha*<sup>9</sup>.

### C. *Nabhi* as a *pitta sthana* or *jyothi sthana*

*Nabhi* is one of the sites of *pitta*. According to *Sushruta* the *garbha* develops due to *rasa* and *marutadhmana* (flow of *vata*). *Nabhi* is called *jyothi sthana* and the *agni* in the *nabhi* of the *garbha* fanned by *vayu*. The same *vayu* in combination with the *agni* spreads in *srotas* in vertical, horizontal and oblique direction and thus growth of the *garbha* takes place<sup>13</sup>. *Dalhana* explains the term *marutadhmana* by saying “*vata* entering into the *srotas* (*sira*) in *dhatu*s of



the fetus causes their dilatation, thus providing space for its growth”<sup>14</sup>.

Here two factors are responsible for the development of the fetus-1.Mother’s *ahara rasa* 2.Vayu with *agni*. Here *nabhi* is considered as the *jyothi sthana* for the place of *agni*. *Vagbhata* has considered the *agni* lies between *nabhi* and *hrudaya*<sup>15</sup>.The *garbha* gets nutrition through *nabhi nadi*. For this it seems *Sushruta* has used the word *rasanimitta* and *marutadhmana*. Here the term *srotas* is interpreted for veins and arteries of the umbilical cord.

#### **D. Nabhi as a main structure in garbha poshana**

This is described more clearly in *Ashtanga Sangraha*. *Vagbhata* said that when all organs and parts of the fetus become well developed, a *nadi* connects the *nabhi* of the fetus with the *apara* which is in turn gets connected with the mothers *hrudaya*. The nutrient portion of the food (*rasa*) travels from the mothers *hrudaya* carried through the *dhamanis* and reaches the *apara* and from there to the *nabhi*. Then it goes to the *pakvashaya* where it undergoes further digestion by the *kayagni* comprised mainly of *rasa* nourishes all the tissues<sup>10</sup>.

According to *Caraka* fetus takes its nourishment through the *nabhi nadi* (umbilical cord). The *nabhi* of the fetus is

connected to the *apara* by *nabhi nadi*. The *apara* is in its turn connected with the *hrudaya* of the mother. The heart of the mother floods the *apara* by the pulsating *sira*. This *Rasa* promotes strength and complexion of the fetus<sup>11</sup>.

#### **E. Nabhi as a prana**

*Sushruta* has described that the *prana* of an individual exists in the *nabhi* and *nabhi* itself is concerned with *prana*<sup>2</sup>. According to *Ayurveda rakta* is considered as *prana* and *jiva*<sup>16,17</sup>. *Rakta* is the one of *dhatu*<sup>18</sup> and gives nutrition to the body<sup>19</sup>. The *prana* is supplied to the body through *rakta*. The *rakta* is formed from *ahara rasa*<sup>20</sup> and flows in *siras* for maintains of life activities<sup>21</sup>. *Vagbhata* said that the life retains as long as *rakta* retains<sup>17</sup>. *Sharangadhara* has described that the *rakta* exists all over the body and is the best supporter of life<sup>22</sup>. According *Caraka* living creatures are endowed with *bala* (strength), *varna* (complexion), *sukha* (happiness) and *ayush* (longevity) due to pure blood. *Rakta* plays a vital role in the substance of vital structures<sup>23</sup>. *Cakrapaani* in his commentary of *Caraka suthra sthana* 30<sup>th</sup> chapter said that main function of the blood is *jivana*. It is a synonym for *ayu* or life. *Jivana* is explained as one which causes *dharana* of



life. Blood is stated to be the *mula* of the body as it causes the *dharana* of the body<sup>24</sup>.

#### **F. Cakra nabhi**

*Sushruta* described that the *nabhi* surrounded by *siras* from all sides like spokes arising from centre of wheel. According to *Ayurveda* root of *siras* is *nabhi*, because from *nabhi* they spread upwards, downwards and obliquely. They nourish the body like river and streams in term of *Jala harini*<sup>12</sup>.

According to *Yoga* philosophy, in *Shadchakras* the third *chakra* is *manipura*. It is situated in *nabhi* region. This *chakra* is also called as *nabhi chakra*. In this context the word *mani* is used in the sense of *agni*. Both *mani* and *agni* have *tejas* property<sup>25</sup>.

#### **G. Nabhi as a marma**

The science of *Ayurveda* has described *marmas* with immense importance as they are the vital spots that can cause serious ill effects to the individual health<sup>26</sup>. *Nabhi marma* is one among the 107 *marmas* explained in the science. If injured, it can lead to immediate death or death within 7 days. It is single in number, belonging to the abdominal region. This *marma* is structurally made of *sira*, and is of one's own palm size in area (4 *Angulas*)<sup>27</sup>. On the basis of location, it lies between *pakvashaya* and *Amashaya*<sup>6</sup>.

## **DISCUSSION**

The above descriptions claim lot of importance in connection to the functional, clinical, embryological and structural aspects of *nabhi*. In this literature an effort is made to show and exhibit the *nabhi* compared with modern anatomical structure by referring all the classics and *sangraha*karas. The modern correlations on umbilicus provided by the different scholars vary in many ways. It is translated as umbilicus, whole of anterior abdomen, inferior epigatric vessels and rectus abdominis muscle. It is correlated to abdominal aorta and inferior vena cava by some<sup>28</sup>. But Anatomical, physiological and pathologically in both *Ayurvedic* and modern it is came to know that *nabhi* is umbilicus. *Nabhi* is structurally very important structure in the body and it contains *prana*. The following points suggests vital importance of nabhi-

❖ Anatomical situation of *nabhi* is in abdomen and present in between the *amasaya* and *pakvasaya*<sup>6</sup>. According to modern anatomy the position of the umbilicus is variable. In healthy adults it lies in the anterior median plane of abdomen, at the level of the disc between the third and fourth lumbar vertebrae. It is lower in



infants and in person with a pendulous abdomen<sup>29</sup>.

❖ *Nabhi* as a *prabhava sthana* of *dhamanis* and *siras*<sup>7,8</sup> - *nabhi* is considered as the originating source for vessels present in between the *amashaya* and *pakvashaya*. These vessels are the nutrient passages as for example for the nourishment of the land humans are conducting water irrigation by furrows from thousands of years in the same way these vessels act as channels for showering sustenance to different parts of our body. *Nabhi* is called as *sira mula* or root of veins or blood vessels in the body. Anatomically we do not see any veins or arteries being connected or getting originated from the *nabhi*. But the connectivity to the *siras* is explained on the basis of fetal circulation. Thus *nabhi* is *sira mula* and *mula* for our existence.

❖ Physiologically *nabhi* is a *pitta sthana* or *jyothi sthana*<sup>13</sup>. It may be due to the proximity of the digestive organs with *nabhi* that it is considered as *pitta sthana*. The digestive tract, mainly the stomach and small intestine (with liver and pancreas) mainly function with the help of *pitta*, the fire element. The fire element or *agni tatwa* is said to be represented in the body in the form of *pitta*. *Nabhi* is closely related to *agni* or *pachakagni* in the body. Therefore

*nabhi* is also an *agni sthana*. *Grahani* is situated at umbilical area or at *nabhi*, which shelters *agni*. It is situated in between *amashaya* and *pakvashaya* like a bolt or latch. This also bears *pittadhara kala* in which *agni* is placed. Thus *nabhi* represents *agni*.

❖ *Nabhi* is a main structure in *garbha poshana*. During fetal circulation, the blood vessels which connect the child and mother, carrying nutrients to the child pass through the umbilicus of the child. Thus Navel has been a root of circulation in the earlier days of the child and is thus considered responsible for our existence and survival. If fetal circulation is hampered due to any defects of circulation system or blocks or inadequate nutrients from mother, we can find the child to be born with deformities and birth defects, stunted growth or intra-uterine death. In this way all the blood vessels enter the body of the fetus through umbilicus and spread all over the body of the fetus and gives nutrition to the fetus. So umbilicus is very important structure in fetal life<sup>30</sup>.

❖ *Nabhi* is one of the *pranayatana* and it naturally contains *prana*. The *prana* is supplied to the fetal body through *rakta*. According to modern medical science, oxygen transportation is the function of blood. Oxygen is the *prana vayu*. As blood



is the transporting agent of *prana vayu*, as it is circulated from the *nabhi*, *nabhi* is the *mula* of *prana vahana* and thus by supplying *prana* to the whole body, *nabhi* does the *jivana karma*. In fetal life umbilical cord is only connection in between mother and the fetus. It connects placenta of the mother to the umbilicus of the fetus. Oxygenated blood is carried by umbilical veins from placenta of mother to the fetus. These veins enter the fetus body through umbilicus. So *nabhi* is important structure in fetus and it is considered as *prana*<sup>31</sup>.

❖ In fetus umbilical cord connects to the *nabhi*. It contains one vein and two arteries. Umbilical vein after enter into the body of the fetus goes upwards and divided into right and left branches. Umbilical arteries are two in number, these carries deoxygenated blood from the fetus to the placenta of mother. This is branch from the internal iliac arteries and lead to the placenta through umbilicus. Umbilical veins and its branches and umbilical arteries look like wheel appearance at the *nabhi*.

After birth with reference to the lymphatic and venous drainage the level of the umbilicus is a water-shed. Lymph and venous blood flow upwards above the plane of the umbilicus; and downwards below this plane<sup>32</sup>.

The umbilicus is one of the important sites at which tributaries of the portal vein anastomose with systemic veins (porto-caval anastomoses). In portal hypertension these anastomoses open up to form dilated veins radiating from the umbilicus (caput medusae)<sup>33</sup>.

Above modern anatomical statements also it proves that *nabhi* is surrounded by *siras*. Hence *nabhi* is considered as *chakra nabhi*.

According to *Yogic* science the *manipura chakra* situates at *nabhi*. This *Chakra* is anatomically considered as the celiac are solar plexus. The celiac plexus is the largest of autonomic nerve plexuses, also known as the solar plexus, because of its location in the center of the body (at the level of umbilicus) where radiating nerve fibers extend in all directions to the important abdominal organs. The celiac plexus is sometimes referred to as the abdominal brain because of its location and function. The celiac plexus is a network of nerve fibers located in the abdomen, which is composed of grey and white brain matter similar to that of the cerebrum. It sends and receives impulses and signals to the other organs in the abdomen. The celiac plexus is responsible for the nutritional distribution to the other organs. Injury to the celiac plexus often paralyzes the entire body and if the



injury is bad enough may lead to death. So it is known as the body's power house and which contains its life force<sup>34</sup>.

❖ Dr. *Ghanekar* has commented regarding *nabhi marma* that the whole anterior abdomen is *marmasthal*, since all important organs are situated behind the *nabhi*. After birth there is no relation between *nabhi* and *sira*. It is true that the important anatomical structures lie in the abdomen behind *nabhi* in cases of injury at the *nabhi*, these important structures are damaged and thereby death may follow due to shock<sup>35</sup>.

is after getting digested properly, are transferred through the same path. So *nabhi* is having prime importance in physiology, pathology and in medicine also in *Ayurveda*.

## CONCLUSION

*Nabhi* is a structure from where something arises or generates which is taken to the center like the axis from where the spokes arise, to go to the periphery. This place is very important in *Ayurveda*. From this place the umbilical cord begins in fetus. *Nabhi* is considered as *sadyapranahara marma*. Not only that, but all the *dhamani* and *sira* also originate from *nabhi* which are transporting *ahararasa* and *dosha* from *nabhi* to all over the body. In the same manner abnormal *ahararasa* and *dosha* are also taken to various parts of the body. So the mode of basic pathogenesis is closely related to this place. The drug after the action of *agni* that



## REFERENCES

1. *Agnivesa, Caraka samhita sutrasthana, Ayurveda dipika* commentary of *Chakrapanidatta* edited by *Yadavaji Trikamji, Nirnaya sagara press, Bombay, 5<sup>th</sup> edition 2001, Ref.no.30/9-11.*
2. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta Shastri, Caukhambha Sanskrit bhavana, Varanasi, 11<sup>th</sup> edition,1997,Ref.no. 7/5*
3. *Agnivesa, Caraka samhita sharirasthana , Ayurveda dipika* commentary of *Chakrapanidatta* edited by *Yadavaji Trikamji, Nirnaya sagara press, Bombay, 5<sup>th</sup> edition 2001, Ref.no. 7/9.*
4. *Vrddha Vagbhata, Ashtanga Sangraha sharirasthana, Hindi* commentary by *Atrideva Gupta, Krishnadasa academy, Varanasi, 1993, Ref.no. 3/13,14.*
5. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta Shastri, Caukhambha Sanskrit bhavana, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 6/7, 9.*
6. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta Shastri, Caukhambha Sanskrit bhavana, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 6/6, 25.*
7. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta Shastri, Caukhambha Sanskrit bhavana, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 7/3-5.*
8. *Vagbhata, Ashtanga Hrudaya sharirasthana, English translation by Prof. K.R. Srikantha Murti, Krishnadasa academy, Varanasi, 2<sup>nd</sup> edition, 1997, Ref.no. 3/18-19, 3/39-40.*
9. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta Shastri, Caukhambha Sanskrit bhavana, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no.3 /31.*
10. *Vrddha Vagbhata , Ashtanga Sangraha sharirasthana , Hindi* commentary by *Atrideva Gupta, Krishnadasa academy, Varanasi, 1993, Ref.no. 2/11, 17.*
11. *Agnivesa, Caraka samhita sharirasthana , Ayurveda dipika* commentary of *Cakrapanidatta* edited by *Yadavaji Trikamji, Nirnaya sagara press, Bombay, 5<sup>th</sup> edition 2001, Ref.no. 6/23.*
12. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika Hindi* commentary by *Dr. Ambikadatta*



- Shastri, Caukhambha* Sanskrit *bhavana*, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 7/26.
13. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika* Hindi commentary by *Dr. Ambikadatta Shastri, Caukhambha* Sanskrit *bhavana*, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 4/57.
14. *Sushruta, Sushruta samhita sharirasthana* , *Nibandha Sangraha* commentary of *Dalhana* by *Yadavaji Trikamji, Caukhambha Surbharati Prakasana*, Varanasi, 1994, Ref.no. 4/57
15. *Vagbhata, Ashtanga Hrudaya sutrasthana*, English translation by Prof. *K.R. Srikantha Murti, Krishnadasa academy*, Varanasi, 2<sup>nd</sup> edition, 1997, Ref.no. 1/7.
16. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika* Hindi commentary by *Dr. Ambikadatta Shastri, Caukhambha* Sanskrit *bhavana*, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 14/44.
17. *Vagbhata, Ashtanga Hrudaya sutrasthana, Sarvangasundari* comm. by *Arunadatta and Ayurveda Rasayana* comm. of *Hemadri, Caukhambha orientalia*, Varanasi, 1997, Ref.no. 11/3.
18. *Vagbhata, Ashtanga Hrudaya sutrasthana*, English translation by Prof. *K.R. Srikantha Murti, Krishnadasa academy*, Varanasi, 2<sup>nd</sup> edition, 1997, Ref.no.1/13.
19. *Agnivesa, Caraka samhita chikitsasthana* , *Ayurveda dipika* commentary of *Cakrapanidatta* edited by *Yadavaji Trikamji, Nirnaya sagara press*, Bombay, 5<sup>th</sup> edition 2001, Ref.no.15/36
20. *Sushruta, Sushruta samhita sharirasthana, Ayurveda tattvasandipika* Hindi commentary by *Dr. Ambikadatta Shastri, Caukhambha* Sanskrit *bhavana*, Varanasi, 11<sup>th</sup> edition, 1997, Ref.no. 14/5.
21. *Vagbhata, Ashtanga Hrudaya sutrasthana, Sarvangasundari* comm. by *Arunadatta and Ayurveda Rasayana* comm. of *Hemadri, Caukhambha orientalia*, Varanasi, 1997, Ref.no. 11/4.
22. *Saranghadhara, Saranghadhara saihita purvakhanda*, translated by *Himasagar Candra Murthy, Caukhambha Bharathi Sanskrit series office*, Varanasi, 2<sup>nd</sup> edition , 2007, Ref.no. 6/10.
23. *Agnivesa, Caraka samhita sutrasthana* , *Ayurveda dipika* commentary of *Cakrapanidatta* edited by *Yadavaji Trikamji, Nirnaya sagara press*, Bombay, 5<sup>th</sup> edition 2001, Ref.no. 24/4.



24. *Agnivesa, Caraka samhita sutrasthana*, *Ayurveda dipika* commentary of *Cakrapanidatta* edited by *Yadavaji Trikamji*, *Nirnaya sagara* press, Bombay, 5<sup>th</sup> edition 2001, Ref.no. 30/6.
25. <https://www.chakras.net/energy-centers/manipura>
26. *Sushruta, Sushruta samhita sharirasthana*, *Nibandha Sangraha* commentary of *Dalhana* by *Yadavaji Trikamji*, *Caukhambha Surbharati Prakasana*, Varanasi, 1994, Ref.no.3/17.
27. *Sushruta, Sushruta samhita sharirasthana*, *Nibandha Sangraha* commentary of *Dalhana* by *Yadavaji Trikamji*, *Caukhambha Surbharati Prakasana*, Varanasi, 1994, Ref.no. 6/6, 25.
28. Tirth Raj, A critical study on *Nabhi Marma*, its modern correlates and clinical significance, M.D.Thesis, BHU, Varanasi, December 2011.
29. Inderbir Singh, Text book of Anatomy, Jaypee Brothers Medical Publishers, volume-II, 5<sup>th</sup> edition, 2007, page-506
30. Sadler T.W., Medical Embryology, first Indian print edition, page- 104,196.
31. *Thatte D.G., Sushruta samhita sharirasthana* English translation, *Caukhambha* orientalia, Varanasi, 2<sup>nd</sup> edition, 2005, page-72.
32. Chaurasia B.D., Human Anatomy-Regional and Applied, CBS Publishers & distributors, volume-II, 3rd edition, 2005, page-121.
33. Chaurasia B.D., Human Anatomy-Regional and Applied, CBS Publishers & distributors, volume-II, 3rd edition, 2005, page-165.
34. Chaurasia B.D., Human Anatomy-Regional and Applied, CBS Publishers & distributors, volume-II, 3rd edition, 2005, page-280.
35. *Sushruta, Sushruta samhita sharirasthana, Ayurvedarahasya Dipikakhakya Hindi* commentary by *Dr.B. G. Ghanekar, Meharcanda Laksamana Dasa*, 4<sup>th</sup> edition, 1972, page -123.