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A REVIEW OF NABHI MARMA AND ITS IMPLICATIONS IN YOGIC PRACTICES

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ABSTRACT

Marma are vital centres or subtle energy fields of the body. Marmas are important aspect in vogic practices with which ayurveda is closely connected. The word Nabhi is of varied importance as it has relevance to vital spot (marma) and as a regional landmark. Its clinical and functional importance is based on these grounds. Nabhi marma is described under udar gat marmas and injuries inflicting it lead to immediate death or death within seven days. Nabhi marma located at the navel region is house of prana, seat of Agni, and is also related to pitta and samana vayu. Physio-anatomical structures related to digestive and excretory process are in close vicinity to nabhi marma. Marmas are related to the 7 chakras(energy centre) and 14 nadis(subtle channel) systems emphasized in yogic thought Manipur chakra which is supposed to control all the abdominal organs related to digestive and excretory system. Present study is about different views regarding nabhi marma and to study the correlation between nabhi marma and yogic practices with its implications for maintaining a healthy lifestyle. Nabhi marma has great importance in yogic practices and its manipulations have great impact on digestive and excretory system. An understanding of marmas can add greater efficacy to any level or type of yoga practice whether using body, the breath or the mind. Manipulation of nabhi marma through marma therapy and various yogic practices can stimulate the organs under nabhi marma, smooth muscles of gastro intestinal tract become stronger and digestion power improves. Excretion of waste products takes place in a better way. Yogic practices play an important role to restore the proper connection between the subtle body (our internal energy, moods and emotions) & the physical body resulting in increased health and vitality on both levels.

KEYWORDS: Marma, Nabhi, Yogic Practice.

INTRODUCTION

Ayurveda is india's traditional healing system, its profound system of mind-body medicine, natural living and yogic health. The science of marma or Marma vidya is another extraordinary and dynamic ayurvedic therapy that has tremendous value in health, disease, everyday living and in spiritual practice. Many different marma regions are described in ayurvedic texts along with their specific effects on both body and mind. Marmas range in size from very small to very large, from special points along hands and feet to significant regions on the trunk of the body like heart or navel. When manipulated marmas can alter both the organic function and structural condition of the body. Through the right use of marmas our entire physical and mental energy can be increased or decreased or redirected in a transformative manner.

According to Maharsi Susruta there are 107 *marmas* in the human body. ¹These are very important vital places. Any injury to these parts may lead to severe pain, disability, loss of function, loss of sensation (anaesthesia) and death.

Nabhi marma as described by Acharaya shurut is udargat marma, an instant fatal marma (sadyapranahar) by impact and a sira marma by anatomy. [1] All samhitakars have measured it swapanital in praman whereas Dalhan illustrated chaturaungal or four inches in praman respectively. [14]

Nabhi marma is said to be situated at navel region (umbilicus). Nabhi is considered as an important physio-anatomical structure. It is said to be seat of prana. Acharya charaka and Vagbhat have included it under dashpranayatana, which itself denotes the importance attached with nabhi and its surrounding area. Physiologically nabhi is considered to be pitta sthana/jyoti stahan and a seat of saman vayu. Also agni resides at nabhi. All these factors play an important role in digestive system and the ailments related to it.

There is no direct mention of therapeutic use of *Marma* Therapy in Ayurvedic texts. But *Marma* Therapy has recently evolved a lot and based on utilization of 107 points in the body which are considered as access points to body, mind and consciousness. *Marma* points can be

used to balance the *tridoshas* and *trigunas*. Through manipulation of *marmas* via yogic practices, *prana* can be directed to remove blockages, improve energy flow or tap hidden energy reserve. [19]

Marma are also an important aspect of the science of yoga, with which ayurveda is closely connected. Yoga reflects the physiological view of Ayurvedic medicine with its doshas, tissue, and channel systems, including the role of marmas. Asana or yoga posture work on our physical body to release stress, eliminate toxins and balance our physical energies. This is followed by internal methods of Pranayama (breath control) and Pratyahara (control of the senses) to calm and balance our vital energy. [18]

Nature has made ample provision for maintaining for an automatic and gentle massage of all abdominal organs by the act of respiration. This automatic massage can effectively happen only if the abdominal muscles are strong and elastic. While practicing yogic posture one has to breathe abdominally. Practice of *yogasana* gives the automatic massage to the abdominal muscles and they hold the abdominal viscera in their proper locations thus ensuring proper digestion and absorption. [23]

MATERIAL AND METHODS

The present study depends on data collected from the classical texts of ayurveda and modern books and international journals, magazines, conferences, internet materials, critically evaluated and important information will be sought to approach the objectives scientifically.

DISCUSSION

By the word *nabhi* in Ayurveda; a central part of body or navel is being translated / interpreted. *Nabhi* word is derived from Sanskrit root of *Nanha*, which means puckered circular area. Nabhi is described as located between the organ for storage of undigested food (*Amashaya*) and the organ for storage of digested food (*pakvasaya*). Nabhi Marma is a sira marma of parinaha equal to swapanital or four inches. So far as modern anatomy is concerned the umbilical region is 9.5 cm in length. This is about four fingers according to Cunningham so it is anatomical landmark to locate these organs. [14]

Acharya Charaka has again mentioned *Pranayatana* in *ShareerSthana* as '*Murdha*, *Kantha*, *Hridaya*, *Nabhi*, *Guda*, *Basti*, *Oja*, *Shukra*, *Shonita*, and *Mamsa*'. Both Acharya Charak and Vagbhat have included *nabhi* in *dasapranayatana* and they considered *nabhi* is a *koshtanga*. [11,12]

All the *Pranayatana* extending from head to below are located towards the midline of the body. Likewise the *marma* that are located in the trunk are more relevant than that on the extremeties.^[6] This signifies the relevance of *nabhi marma* lying in the center line of the body, structurally made of sira belonging to abdominal

region. The mention of *nabhi* in *dashpranayatans* signifies the importance given to *nabhi* region. [20]

As per Acharva Sushrut nabhi is center of prana (nabhistha praninam pranaha).[2] It is the seat of pitta therefore called as *jyoti stahana*. Sushruta has described that the prana of an individual exists in nabhi and nabhi itself is concerned with prana. [2] According to Ayurveda rakth is considered as prana and jiva. [2,9] Rakta is one of the *dhatu* and gives nutrition to the body. [9] The *prana* is supplied to body through rakta. The *rakta* is formed from ahar rasa^[2] and flows in sira for maintenance of life activities. Vagbhata has said that life retains as long as rakta retains. [9] Sharangdhara has described that the rakta exists all over the body and is the best supporter of life. [10] According to charaka 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. [11] Chakrapani in his commentary of charak sutra 30th chapter said that main function of blood is jivana. Jivana is explained as one which causes dharana of life.

Nabhi being as a center of *agni*; or dominant place of *pitta* with the help of *samana vayu* located at *nabhi* perform the process of digestion through *grahana* (consumtion/selection), *pachana* (conversion), *vivechana* (separation), and *munchana* (give up for the next stage). [9]

Nabhi as *sira prabhav*: Sushruta described that the *nabhi* is surrounded by *siras* from all sides like spokes arising from center 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 streams in term of jala harini. ^[6]

There are 700 vessels (sira) and 24 pulsating vessels (*dhamani*)^[12] in the body. They originate from *nabhi* and move in the three directions- i.e upwards, downwards, and transverse. The vital energy (*prana*) of an organism is situated in *nabhi* which is surrounded by vessels just like spikes of wheel. Dr. Ghanekar has accepted the fact that *nabhi* has got no relation to the roots of *sira* the possiblility of the narration in different samhita is due to relation in intrauterine life. [5,14] The *nabhi* of fetus and the heart of the mother are bounded by connecting cord (*nabhinadi*). [2] It provides nutrition to the fetus. Developmentally *nabhi* is derived from mother. After I.U.L.Sira are never related to *nabhi*.

Also *nabhi* is shows a close relationship with *annavaha srotas*(digestive system) and the *rakthavaha srotas* (channel for blood).

Contemporary views

Umbilicus is the central point of the body which is made of dense fibrous tissue. Its position is variable. In healthy adults, it lies in anterior median line at the level of disc

between L3 and L4 vertebrae. It is lower in infants and in persons with pendulous abdomen. The important structures coming below and deep to umbilical region of abdomen include the second part of duodenum, pancreas, the inferior-vena cava, abdominal aorta and its branches. The main branches of abdominal aorta are celiac trunk, superior mesenteric artery, inferior mesenteric artery and finally divide in to external and internal iliac artery. [13]

Embryologically, umbilicus represents the attachment of foetal end of umbilical cord. In early part of intra-uterine life it transmits the vitellointestinal duct and allantoic diverticulum. [20]

As per dissection conducted on cadaver the structures coming under the umbilical region include part of stomach greater omentum, 2nd to 4th part of duodenum, 2/5th of small intestine i.e jejunum, ileum, root of mesentery(12 level), transverse colon and mesocolon, head of pancreas (11 & 12 level), lower pole of kidneys (13 level), beginning of abdominal part of ureters, superior mesenteric arteries(11 level), inferior mesenteric arteries(13 level) with autonomic plexus, bifurcation of abdominal aorta(14) level, beginning of inferior vena cava(15 level), formation of portal vein (12 level), dermatomes passing through are T9, T10, T11, T12, anastomose between superior and inferior epigastric, psoas major muscle, right and left cura of diaphragm, body of L1 to L5 vertebra with intervertebral discs. [20]

Nabhi Marmas and system of yoga: Nabhi marma being an udargat marma, its circumference involves the organs of digestive and excretory system, all the yogic postures acting on nabhi marma will automatically stimulate the organs located here.

Asana are divided into two groups: 1. Cultural pose and 2. Meditative pose^[23]

The aim of cultural pose is to produce physiological balance in different system working in human body, so that it can possess the best organic vigor. They are specially intended to take care of the musculoskeletal system, respiratory system, endocrine system, digestive system, excretory spinal column, genital system. While practicing yogic posture one has to breath abdominally. All yogic postures in which body is moved forwards & backward affect the *marma* of abdomen, chest & back.^[23]

Useful in digestive system diseases^[16]

- Asana: Vajrasana, supta vajrasana, ardhamatsyendrasana, paschimottana -sana. Mayurasana, pavanmuktasana. katichakrasana, bhujangasana. dhanurasana, sarvangasana, trikonasana, chakrasana, surya-namaskara.
- 2. Pranayama: Nadi Shodhana, bhastrika.
- 3. Bandha: Moola bandha, uddiyana bandha, etc.
- 4. Mudra: Ashwini mudra, tadagi mudra, maha mudra etc
- 5. Kriya:- Kunjala, vasti, sankhaprakshalana, Nauli, vastradhauti, agnisara etc.
- 6. Marma therapy:- Nabhi Guda, kurpara and indravasti.

Useful yogic practices in urine excretory system^[16]

- 1. Asana: Ardhamatsyendrasana, matsyendrasana, ustrasana,trikonasana, paschimottanasana, naukasana, pavanmuktasana, supta-katichakrasana, kati chakrasana,bhuganagasana, mayurasana, dhanurasana, halasana,bhunamanasana, hastapadangysthasana, surya namaskara etc.
- **2.** *Pranayama*: *Nadishodhana pranayana, bhastrika pranayana* etc.
- 3. Bandha: Mula bandha, uddiyana
- **4.** *Mudra*: *Ashwinimudra*, *tagadimudra*, *mahamudra*, *bajrali mudra* etc.
- **5.** *Kriya*: Vasti, nauli, sankha prakshalana, agnisarakriya, kunjala etc.
- **6.** *Marma* **therapy**: *Parsvasandhi*, *guda*, *vasti*, *nabhi* and *marmas* of lower extremity.

Following *asanas* involve the *nabhi marma*, thus stimulating the organs of digestive system and helping to alleviate the ailment related to it.^[16]

Table: 1.

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Sr no	Asana(posture)	Marma Involved	Useful in ailments	
1.	Pavanmuktasana/ Wind-releasing posture	Nabhi , Vitap, lohitaksha, basti, & thorax	Improves indigestion & reduces abdominal fat. Positive effect in IBS	
2.	Matsyasana/ Fish pose	Kakshadhara, vitap, lohitaksha, basti, nabhi ,thorax	Expands chest, strengthens lungs & brings oxygenated blood to thyroid.	
3.	Bhujangasana/ Cobra pose	Kakshadhara, vitap, lohitaksha, basti, nabhi , thorax, upper limbs	Expands chest, strengthens lungs & heart, awakens kundalini	
4.	Dhanurasana/ Bow Posture	Nabhi, Vitap, lohitaksha, basti, & thorax, back and both extremity marma	Strengthen spine, intestine, liver & kidney, improves digestion, reduces fat	
5.	Chakrasana/ Wheel Posture	Nabhi, Vitap, lohitaksha, basti, & thorax, back and both extremity	Affects whole body, esp spine, strengthen upper & lower limbs	
6.	Ardha matsvendrasana/	Nabhi . Vitap. lohitaksha.	Retards aging tones the nervous system.	

	Half spinal twist pose	basti, & thorax, back and both extremity marmas	& strengthen the reproductive glands.
7.	Bhadrasana/ Nobility posture	Nabhi Vitapa, lohitaksha, basti, guda	Relieves urinary disorders &sciatic pains, keeps kidneys, prostate, bladder & ovaries functioning properly.
8.	Mandukasana/ Frog Posture	Nabhi Basti, lohitaksha, vitap & marma of thorax back and both limbs	Improves function of pancreas, improves amount of insulin & gastric & liver secretions
9.	Mayurasana/ Peacock Posture	Nabhi, lohitaksha & marmas of thorax, back and both upper & lower limbs	Alleviates indigestion & constipation, helpful for diabetes, hemorrhoids & inflammation of intestine/liver

Nabhi and Shatchakra

According to yogic science among the *shatchakras* mentioned the *manipura chakra* known is as the navel center, and is situated at the umbilicus. It is in close association with the celiac or solar plexus. The red triangular mandala in its center contains the primordial elements of fire. It is related to the sense organ of the eye and has ten petals, which are of dark purple colour. The presiding deity is rudra and the bija mantra is Ram. [14]

The chakra as anatomically considered as the celiac plexus. The celiac plexus is the largest of autonomic nerve plexus, also known as 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 at the abdomen, which is composed of grey and white brain matter similar to that of 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 fatal may lead to death. So it is known as the body's power house and which contains its life force. [24]

By treating their respective *marmas*, we can treat the *nadis*, elements, sense and motor organs, and other factors associated with the *chakras*. Ex- through treating the *marmas* in the region of the navel, one can work on the fire element in the body, including the digestive fire (*agni*) and organs of the digestive system, the sense of sight and the feet as the motor organ. ^[16]

Self-marma therapy on the thorax and abdomen:- Sit in *sukhasana* or lotus pose. Touch the umbilicus and the cardiac area of the chest with the tip of the fingers collectively. Apply sandal wood paste or oil over these vital points regularly. Stimulation of the anus can be achieved by alternate constriction and relaxation exercise of the anus (*ashwini mudra*). [16]

Also practice of *uddiyana bandha* and *nauli* (*yogic shatakriyas*) gives a vertical and lateral massage to abdominal muscles.

Effect of *marma therapy* and yogic practices on Digestive and Excertory System^[16]

Digestive power of the body improves by regular selfmarma therapy involving nabhi marma and yogic practices. The essential substances are supplied to the body regularly by absorbing these substances through absorption of the food material by the intestine. Metabolism of food takes place in the liver. Excessive available nutrients are deposited in different parts of the body. During necessity the body itself utilizes these nutrients.

The following effects are seen on the digestive system by *marma* therapy and *yogic* practices.

- 1. It maintains the digestive power healthier by stimulating all organs of Gastro Intestine Tract.
- 2. It improves the digestive function of the body.
- 3. Increases the appetite by proper digestion of food.
- 4. Improves the function of intestine, so the intestine takes out the harmful substances properly.
- 5. Improves the peristaltic movement of Gastro Intestine Tract and relieves constipation, loss of appetite and hyperacidity.
- 6. By proper digestion of food the body gets proper nutrients and it also improves the working capacity of the body.
- 7. During self-*marma* therapy and yogic practices due to increased blood circulation in the brain, heart, kidneys, pancreas and liver, the working capacity of these organs increases. The body becomes healthier. The kidneys play an important role in urine formation and excretion of metabolites through urine. Kidneys are the main blood filters. The liver plays an important role in the digestion of food. Bile formation takes place in the liver. From the liver bile comes into the gall bladder, shrinks, and the whole bile comes into the duodenum. Bile is important for the digestion of fat in many ways. But it contains many other metabolites, pigments, salts and excretory substances that also reach in the intestine and is evacuated through the faecal material and urine. [16]

Smooth muscles of gastro intestinal tract become stronger and digestion power improves. Excretion of excretory substances takes place in a better way. Yogic practices play an important role to improve the functioning of all excretory organs.

RESULT

As per above discussion pertaining to gross anatomy, embryology, physiological aspect it is noted that *nabhi* is complex structural arrangement in the umbilicus within the 4 angula circumference and depth. *Nabhi Marma* being the center of the body and the site of physiologically important factors like *prana*, *agni*, gives abode to important structures related with the digestive system. These factors improving the digestive fire(*jatharagni*) which in turn leads to proper functioning of bodily system can be manipulated by stimulating *nabhi marma* by various yogic practices.

CONCLUSION

According to our Mythological references, it is said that there was nectar in the umbilicus of Ravana. Lord Rama fired an arrow into the umbilicus of Ravana causing his death. This demonstrates the importance of *nabhi marma*, any injury to this point may be fatal. So the protection, stimulation and nutrition of this points may help in physiological functioning of the body. *Marma* stimulation converts the total negative energy of the body into positive energy, we can therefore see the close and astounding inter-relationship between the two practices, the practice of *Marma* being inherent in the Yogic postures.

In all the higher yogic practices as well, like the various *pranayama* and *mudras*, as well as concentration / meditation on the *chakras*, various *marma* points get affected and stimulated.

We can summarise nabhi *marma* stimulation by yogic practices gives the dual advantage of disease control with instant symptomatic response and permanent cure without adverse effect. In this way, with *marma* science and yogic practices we can promote health and vitality for daily life and obtain freedom from disease and suffering and disharmony.

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