

## A REVIEW OF 'SHARIR DHATU VYUHKARA' KARMA OF VATA DOSHA IN GARBHA AND SHARIR

Ganesh M. Adelkar\*<sup>1</sup> Sachin V. Kapase<sup>2</sup>

<sup>1</sup>HOD & Professor, Kriya Sharir Dept. Dr. J. J. Magdum Ayurved Medical College, Jaysingpur, Maharashtra, India – 416101

<sup>2</sup>Associate Professor, Kriya Sharir Dept. Vasantdada Patil Ayurvedic Medical College, Sangli, Maharashtra, India - 416416

Email: [gadelkar80@gmail.com](mailto:gadelkar80@gmail.com)

### ABSTRACT

*Ayurveda* is considered as science of life. It narrates treatment of various diseases and explains different ways for preservation of health as well. In *Ayurveda*, health is considered as the balanced state of *tridoshas* i.e. *vata*, *pitta* and *kapha*. These three *doshas* are said to be responsible for origin, maintenance as well as destruction of human body. Out of these three *doshas*, *vata dosha* is given most importance considering its bodily functions, which play a major role in *sharir dharana*. Out of its various functions, we must understand its '*sharir dhatu vyuhakara*' *karma* if we wish to understand its role in origin and development of human body. In *Charak samhita*, in '*vatakalaliya adhyaya*' of *sutrasthana*, it is stated that *vata dosha* carries out the function of '*dhatu vyuhakara*', which means it is responsible for specific arrangement of *dhatu*s within the body. This peculiar function of *vata* determines the anatomical characteristics of the body. In order to study the '*dhatu vyuhakara*' *karma* of *vata dosha*, a detailed literary review was made, and conclusions were drawn. It was found that *vata dosha* is responsible for origin and maintenance of anatomical structure of human body and its organs in both stages of life i.e. *garbha* and *sharir*, in their formation and development. It was also observed that structural abnormalities observed in these stages of life are associated with *vata dosha*.

**Keywords:** *Ayurveda*, *vata dosha*, *dhatu vyuhakara karma*, *garbha*

### INTRODUCTION

*Vata* is considered as '*doshanam neta*' as it acts as a driving force and controls the activities of other *doshas*, *dhatu*s and *malas*.<sup>1</sup> *Vata dosha* controls and maintains the human body through its five types i.e. *prana*, *udana*, *samana*, *vyana* and *apana*. It carries out various functions in the body like initiation and control of movements, control of mind, provide stimula-

tion to *indriyas*, production of speech, *sharir sandhana*, *harsha*, enthusiasm, to maintain *jathragni*, elimination of wastes from the body, perception of touch and sound, etc.<sup>2</sup>

Apart from all the above functions, it does carry out the '*sharir dhatu vyuhakara*'<sup>3</sup> *karma*. It performs this function right since the first stage of human life i.e.

formation of *garbha* and it continues with this function throughout the development of the human body. Anatomical characteristics of the human body and its organs i.e. their size, shape, structure, etc. depend upon this *karma*. Consequently, vitiation of *vata dosha* results in structural abnormalities of bodily organs, which also results in their dysfunction. This can be seen during the fetal stages of life as well as during the developmental stages of human body. From the viewpoint of pathology, congenital as well as acquired structural defects can be seen in musculoskeletal, endocrine or nervous disorders. These can be attributed to *vata dosha*. Proper understanding of '*dhatu-vyuhakar karma*' of *vata dosha* gives us scope for further study in prevention of such structural abnormalities through *Ayurvedic* treatments like *snehan*, *basti*, etc. Hence, through this review article, a sincere effort has been made to study different aspects of '*sharir dhatu vyuhakara*' karma of *vata dosha*.

#### **Aim and Objectives:**

1. To understand different aspects of '*sharir dhatu vyuhakara*' karma of *vata dosha*.
2. To study the '*sharir dhatu vyuhakara*' karma of *vata dosha* in *garbha* and *sharir* in view of *Kriya Sharir* and *Vikriti Vigyan*.

#### **Materials and Methods:**

This is a review article. References from *Ayurvedic* classics like *brihatrayi*, *laghutrayi* and other *Ayurvedic* books were collected. Modern physiology and pathology books were also referred to collect more information. Online medical sources were also utilized. All the information was reviewed and properly associated. An honest attempt has been made to draw conclusion after discussion.

#### **Observations:**

In *Ayurveda*, it is stated that *vata dosha* is *vibhu*, *aashukari*, *bali* and *swantrantra*. It vitiates other components of the body and causes several diseases<sup>4</sup>; hence it is given prime importance in maintenance of health as well as in treatment of diseases. It has properties like *ruksha*, *laghu*, *sheeta*, *khara*, *sukshma*, *chala*, etc. Through its *chala guna*, it provides stimulation to other *doshas* like *pitta* and *kapha*, *dhatu*s and *malas* to carry out their functions. It is responsible for con-

trolling all kinds of movements of the body, voluntary or involuntary. It also controls the perception of senses by sense organs. It takes part in digestion as well as waste removal from the body. It controls mind and provides *harsha* and enthusiasm.<sup>5</sup> More importantly, it maintains the structural integrity of the body and is responsible for peculiar structural aspects of the body. *Vata dosha* has a specific function mentioned as '*sarva sharir dhatu vyuhakara*.' It means the specific arrangement of the *dhatu*s within the body. In human body, *asthi dhatu* or bones are placed at the core of the body. Nervous tissue from CNS is protected inside the bones. Other structures like muscles, tendons, ligaments, etc. are attached to bones. Blood vessels as well as nerves run through muscles. Along with underlying fascia, skin is placed as outer covering for human body. *Vata dosha* is responsible for this specific arrangement of bodily structures. This function is observed especially during formation of *garbha* and its development.

According to *Acharya Charaka*, based on '*paramanubhedha*', body organs are innumerable, and they are '*atisukshma*' in nature. '*sanyoga*' and '*vibhaga*' of these depend upon *vata dosha*.<sup>6</sup> At microscopic level, innumerable organs of the body can be compared with innumerable number of cells. Their *Sanyoga* denotes the attachment or binding of cells to form tissues. *Vibhaga* denotes the division of cells. These functions are easily observed in *garbha*. Hence it can be considered as cell division and differentiation occurs under the influence of *vata dosha* during the development of *garbha*. It is properly stated that '*garbhakruti nirman*' is function of *vata dosha*. When *vata dosha* gets vitiated and affects the formation of *garbha*, it splits the zygote in various ways and one can observe the *vikrutis* like twins, triplets,<sup>7</sup> etc.

Formation of *srotasas* is an essential step required for the development of *garbha*. *Vata dosha* creates different *srotasas* in the body with some help from *pitta dosha*.<sup>8</sup> Proper nutrition of *dhatu*s occurs after formation of *srotasas* which leads to development of the human body. Malformation of a *srotas* at the time of development due to vitiation of *vata dosha* leads to congenital abnormalities in fetus.

Vata dosha also plays a role specifically in the formation of some organs at the time of development of garbha into sharir. According to Sushrutacharya, during the paka of best part of rakta and shleshma, vata dosha along with pitta goes through it and creates intestines, anal canal and urinary bladder. When it goes through the mamsa dhatu, it separates it into mamsa peshi i.e. muscles. It converts sira into snayu with the help of sneha from meda dhatu. It is also responsible for formation of different ashayas within the body.<sup>9</sup>

Vitiated vata dosha destroys, deforms or retains the embryo for longer periods. It is responsible for structural deformities of the body which can be congenital or acquired after birth. Cleft lip, cleft palate, polydactyly i.e. extra fingers or toes, clubfoot, congenital heart defects like atrial or ventricular septal defects, transposition of great arteries, pulmonary atresia, tetralogy of Fallot, patent ductus arteriosus; neural tube defects like spina bifida, anencephaly; Down syndrome having flat head and nose, deviation of first toes, stunted growth, proportionately large tongue, etc.; these are the examples of congenital birth defects. According to Ayurveda, upon deliberation of karma and vikrutis associated with vata dosha, these defects can be appropriately attributed to vata dosha.

Along with pitta and kapha, vata is responsible for formation of prakruti, which determines specific characteristics of the body. In vataj prakruti, vata dosha is dominant right since the time of conception. Vataj prakruti people have undeveloped body<sup>10</sup> or organs. They have height much more or much less compared to normal. Some endocrine disorders like acromegaly, gigantism, dwarfism or cretinism are associated with above features. These disorders are caused by hyper or hyposecretion of endocrine glands like pituitary, thyroid, etc. According to Ayurveda, vata dosha controls the hormonal secretions by stimulating the glands of the body. Excessive stimulation of these glands by vata dosha leads to hypersecretion of hormones whereas no or less stimulation of the glands leads to their hyposecretion.

Vata dosha is also responsible for developmental abnormalities like sransa (organ slipping from normal location), vyasa (dilatation), sankocha (contraction or

constriction), sousheerya (porous nature), shosha (atrophy), stambha (skeletal muscle spasm), etc.<sup>11</sup> that are acquired after birth. Structural abnormalities like rectal prolapse, anal prolapse, hernia can be considered as sransa. Examples of vyasa are ureteral dilatation, dilatation of the renal pelvis, isolated dilatation of the inferior vena cava, dilated cardiomyopathy, etc. Atrophy of the muscles as in polio, frozen shoulder can be compared with shosha. Osteoporosis is an example of sousheerya. Shirobhag, nasa, akshi, jatru and greeva, all these parts get affected and structural abnormalities occur in them as the vata dosha gets vitiated.<sup>12</sup> In nanatmaj vikaras of vata dosha, kubj, khanj, pangulya are described, which also show specific structural deformities.

## DISCUSSION

From the above observations, vata dosha has gotten a specific role in maintaining the structure of human body. The term 'sarva sharir dhatu vyuhakara' should be understood in a large context. It is not merely limited to the placement of dhatus within the body. The function of vata 'sarva sharir dhatu vyuhakara' is seen in all stages of development of human body. It is seen in fetus formation and its development. It is also seen after birth during development of the body. This function should be understood at the microscopic as well as macroscopic level.

At cellular level, further development of zygote or fertilized ovum occurs through division and differentiation of cells. Intermittent developmental stages like morula, blastula is seen with peculiar structural arrangement of cells. After these stages, three primary germinal layers are formed; ectoderm, endoderm and mesoderm<sup>13</sup>, from which specific types of tissues develop and organs develop. This results in a fully developed fetus. As stated by Charakacharya, paramanu sanyoga and vibhaga's function of vata dosha. Also, vata dosha is stated to be responsible for srotas formation, ashaya formation as well as formation of different organs within the body. So, formation of fetus along with its all structural integrity is considered as the function of vata dosha. Therefore, when vata gets vitiated either at the time of conception or during

the development of embryo, we see conditions like twins, triplets, intrauterine growth retardation, fetal anomalies, etc.

*Vata dosha* also plays its part in maintenance of structural integrity of the body after birth during its development and in later stages of life. Structural abnormalities like *sranas*, *vyasa*, *sankocha*, *soursheerya*, *shosha*, etc. are seen in vitiation of *vata dosha*. All the above abnormalities are not limited to an organ and can be seen affecting almost all the body organs. *Kubj*, *khanj*, *pangulya* etc. are described under *nanatmaj vikaras* of *vata dosha*. All these facts throw light on the function of *vata dosha* as '*sharir dhatu vyuhakara*'.

This importance of *vata dosha* in maintaining the structure of body and bodily organs opens scope for further study regarding the prevention and treatment of such structural abnormalities. *Basti* is considered as the treatment of choice for *vata dosha*. For prevention of some congenital disorders, which are considered hereditary, judicious use of *basti* in particular months of pregnancy should be tried to see its results. Along with that, changes in diet and lifestyle can be applied in pregnancy. This may avoid vitiation of *vata* and consequent structural abnormalities in fetus considering the role of *vata* in fetal development. A detailed research is necessary in this regard. In case of structural defects acquired after births, treatment modalities like *snehapan*, *basti*, diet and lifestyle modifications can be applied.

## CONCLUSION

From the above literary study, following conclusions can be made. *Vata dosha* is responsible for formation and structural development of *garbha*. All stages of development of *garbha* are under the control of *vata dosha* as it is responsible for the division and differentiation of cells. During pregnancy, vitiation of *vata dosha* results in structural abnormalities in fetus. Hence during the time of conception and pregnancy, *vata dosha* should be kept in normal stage through diet and lifestyle modifications. If needed, *shaman* or *shodhan* of *vata dosha* should be carried out through medications or *panchkarma* procedures like *basti*.

After birth, *vata dosha* is also responsible for specific structural development of human body. Vitiation of *vata dosha* in such stages of life creates *vikrutis* like *sranas*, *vyasa*, *sankoch*, *shosha*, etc. Musculoskeletal, nervous as well as endocrine disorders affecting the normal structure of the body organs can be considered as vitiation of *vata dosha*.

## REFERENCES

1. Sharangdhar Samhita, Dr. Smt. Shailaja Srivastava, Chaukhambha Orientalia, Varanasi, Purva Khand, Adhyay No.5, Shloka No.25, Reprint 2011, 40.
2. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Sutrasthan, Adhyay No.12, Shloka No.8, Reprint 2009, 177.
3. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Sutrasthan, Adhyay No.12, Shloka No.8, Reprint 2009, 177.
4. Ashtang Hrudayam with Vidyotini Hindi commentary, Kaviraj Atridev Gupta, Chaukhambha Sanskrit Sansthan, Varanasi, Sharirasthan, Adhyay No.03, Shloka No.84, Reprint 2005, 192.
5. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Sutrasthan, Adhyay No.12, Shloka No.8, Reprint 2009, 177.
6. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Sharirasthana, Adhyay No.7, Shloka No.17, Reprint 2009, 727.
7. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Sharirasthana, Adhyay No.2, Shloka No.14, Reprint 2009, 659.
8. Sushrut Samhita, Dr. Shribhaskar Govind Ghanekar, Meharchand Lachhmandas Publication, New Delhi, Sharirasthan, Adhyay No.4, Shloka No.58, Reprint 2013, 138.
9. Sushrut Samhita, Dr. Shribhaskar Govind Ghanekar, Meharchand Lachhmandas Publication, New Delhi, Sharirasthan, Adhyay No.4, Shloka No.25-29, Reprint 2013, 117.
10. Charak Samhita, Prof. Vaidya Y. G. Joshi., Vaidyami-tra Publication, Pune, Vimanasthana, Adhyay No.8, Shloka No.98, Reprint 2009, 599.
11. Ashtang Hrudayam with Vidyotini Hindi commentary, Kaviraj Atridev Gupta, Chaukhambha Sanskrit Sansthan, Varanasi, Sutrasthan, Adhyay No.12, Shloka No.49-50, Reprint 2005, 94.
12. Charak Samhita, Acharya Vidyadhar Shukla, Choukhamba Sanskrita Pratishthan, Delhi,

Chikitsasthan, Adhyay No.28, Shloka No.22, Reprint 2012, 691.

13. Human Embryology, Inderbir Singh & G. P. Pal, Macmillan Publishers India Limited, Haryana, Chapter 4, Reprint 2013, 43-48.
- 

**Source of Support: Nil**

**Conflict of Interest: None Declared**

How to cite this URL: Ganesh M. Adalgar & Sachin V. Kapase: A Review Of 'Sharir Dhatu Vyuhkara' Karma Of Vata Dosha In Garbha And Sharir. International Ayurvedic Medical Journal {online} 2020 {cited March, 2020} Available from: [http://www.iamj.in/posts/images/upload/3018\\_3022.pdf](http://www.iamj.in/posts/images/upload/3018_3022.pdf)