

ISSN 2456-3110 Vol 6 · Issue 2 Mar-Apr 2021

# Journal of Ayurveda and Integrated Medical Sciences

www.jaims.in

Indexed

An International Journal for Researches in Ayurveda and Allied Sciences





### A conceptual study of anatomy and pathophysiology of Koshtha with its clinical importance in Ayurveda

Dr. Rashmi Jaiswal<sup>1</sup>, Dr. G. R. Chaturvedi<sup>2</sup>, Dr. Sushil Dwivedi<sup>3</sup>, Dr. Dileep Singh<sup>4</sup>, Dr. Namrata Tiwari<sup>5</sup>, Dr. Kuldeep Kumar Sahu<sup>6</sup>

<sup>1</sup>Post Graduate Scholar, <sup>2</sup>HOD and Professor, <sup>3</sup>Associate Professor, <sup>4,5,6</sup>Assistant Professor, PG Dept. of Rachna Sharira, GAC, Raipur, Chattisgarh, India.

### ABSTRACT

According to Ayurveda Tridosha and Panchamahabhuta are the functional and structural entity of body so the anatomy, physiology, pathology and treatment are based upon the principle of Tridosha and Panchamahabhut Siddhanta and these principles are formulating the concept of Aayu, Bala, Prakriti and Koshtha. The line of treatment, drug selection, dose determination as well as indication and contraindication of Aahar and Vihar are based upon the above concept. So, a huge study is needed to explore the above concept by the anatomical, physiological, pathological and clinical approach. Out of them the concept of Kohstha can be explore by the study of Koshtha and its anatomical determination, physiology of Koshtha, Koshtha Pariksha and utility of Koshtha in Sodhana and shaman Chikitsa.

Key words: Tridosha, Panchamahabhuta, Kostha, Prakriti, Sodhana, Shamana.

### **INTRODUCTION**

"Purusham Purusham Vikshaya" is an approach of Ayurveda as unique to thoroughly analyze the total condition of a person to find out the underlying symptoms instead of finding methods to suppress the symptoms.<sup>[1]</sup> There are many concepts in Ayurveda for the examination of Roga and Rogi Bala like Trividha Pariksha.<sup>[2]</sup> Panchavidha Pariksha.<sup>[3]</sup> Shadvidha Pariksha,<sup>[4]</sup> Ashtavidha Pariksha<sup>[5]</sup> and Dasvidha Pariksha<sup>[6]</sup> are explained by different Acharvas. The main motive of these Roga and Rogi Pariksha is to analyze the total condition of a person and

#### Address for correspondence:

Dr. Rashmi Jaiswal

Post Graduate Scholar, PG Dept. of Rachna Sharira, GAC, Raipur, Chattisgarh, India.

waE-mail: rashmisheetal20@gmail.com

Submission Date: 14/03/2021 Accepted Date: 12/04/2021



pathophysiology of the disease. In Ayurveda the condition of person is said to "Dehprakriti" and Dehprakriti is decided by the dominance of Doshas.<sup>[7]</sup> According to the dominance of Doshas "Purush" (a person) has different Agnibala, Dehbala and Koshtha. The term Koshtha refers to the nature of digestive tract which usually represents the motility of intestine, movement of food and fecal material in the alimentary canal with elimination of stool. According to dominance of Vata, Pitta and Kapha Dosha the person is said to Krura, Mrudu, and Madhyam Koshtha respectively.<sup>[8]</sup> In Ayurveda Koshtha is anatomically a cavity formed from Aavarna which is consisting of *Dhatus* (solid structure).<sup>[9]</sup> *Dhatu* and Doshas are interchange between Koshtha to Shakha by Nidansevana.<sup>[10]</sup> Koshtha to Shakha and Shakha to Koshtha Gaman of Dosha has a great pathophysiology and clinical importance. Although Koshtha Pariksha is also important to understood the pharmacokinetics.

### **MATERIAL AND METHODS**

### **Materials**

Literary material, i.e., Ayurvedic classical texts (Charak Samhita, Sushruta Samhita Asthang Hridaya, Bhav

### ISSN: 2456-3110

### **REVIEW ARTICLE** Mar-Apr 2021

*Prakash, and Yoga Ratnakar*) and commentaries along with Modern Ayurvedic texts and books were reviewed to collect the data during work.

### **Methods**

Literary data collected were compared and analyzed on classical background to find similarities, dissimilarities and its clinical approach in accordance to modern science.

### Anatomical study of Koshtha

*Koshtha* is a cavity formed from *Avarana* which is consisting of *Dhatus* (solid structure). *Koshtha* is known as *Mahasrotasa*, which is extended from mouth to the anus i.e., complete digestive system and as *Abhyantara Roga Marga*.<sup>[11]</sup> This means that thoraco-abdominal cavity should be taken as *Koshtha*. Organs placed in this vacant place are called *Koshthanga*.

*Charakacharya* states the fifteen *Koshthangas* - *Nabhi* (umbilicus), *Hrudya* (heart), *Kloma* (pancreas), *Yakruta* (liver), *Pleeha* (spleen), *Vrukka* (kidneys) *Basti* (bladder) *Purishadhana* (caecum), *Aamashaya* (stomach), *Pakvashaya* (small and large intestine), *Uttarguda* (rectum), *Adharguda* (anus).<sup>[12]</sup>

Sushrutacharya states that Koshtha is a cavity containing Hrudaya (heart), Rudhira (blood), Phuphusa (lungs), Amashaya (stomach), Pakvashaya (intestine), Unduka (appendix), Mutrashaya (bladder).<sup>[13]</sup> Sushrutacharya also states that entire abdomen (Sarvam Udaram) should be considered as Koshtha.<sup>[14]</sup>

### Physiological study of Koshtha

Physiologically the term *Koshtha* refers to the nature of digestive tract. According to predominance of *Doshas* there are three types of *Koshtha*;

 Krura Koshtha - In Krura Koshtha Vata Dosha is dominant; it causes hard feces with difficulty of elimination or even non-elimination. Ruksha and Khara Guna of Vata is dominant in Krura Koshtha. Hence Koshtha will be poorly secretive and absorptive.

- Mrudu Koshtha In Mrudu Koshtha Pitta Dosha is dominant, causes watery or semisolid feces, moving out more than once or twice in a day. Sara, Drava, Snigdha and Laghu Guna of Pitta is dominant in Mrudu Koshtha. Hence Koshtha will be smoothing lubricated and slippery. Secretion will be more, but it will be poor in absorption.
- Madhyam Koshtha Predominance of Kapha Dosha causes soft, solid feces moving out smoothly. Snigdha, Guru, and Sthira Guna of Kapha are dominant in Madhyam Koshtha. Hence there will be optimum secretion and absorption.

## Pathological importance of *Koshtha* along with *Dosha Sancharan*

In Ayurveda Koshtha is pathologically very important as an Abhyantara Roga Marga. Charakaacharya denoted the 3 routes of invasion of disease in the body their names are, 1)Bahayaroga Marga (Shakhaanushari) 2)Madhyam Roga Marga (Mamsaasthi-Sandhi) 3)Aabhyantararoga Marga (Koshthaanushari).<sup>[15]</sup>

### Koshthanusari Roga

Jwara, Atisaar, Vaman, Alsak, Visuchika, Kasa, Shwasa, Hikka, Anaha, Udarrog, Pliha are Utapanaa from Anatamarga, while Visarpa (herpis), Shwapthu (odema), Gulma (tumor), Arsha (piles), Vidradhi (Abscess) are disease of Koshtamargaanusarak.<sup>[16]</sup>

Dosha sancharan from the Kosth to Shakaha and from Shakha to Koshth. In Ayurveda, is the transfer of nutrients, the exchange of body fluid is fascinated by the mechanism of Koshtha-Shakha interaction. Vata play a key role in this interaction.<sup>[17]</sup> In any disease when Dosha goes to Shakha from Koshtha the disease being hard to cure and also, we cannot get the desirable effect of Shodhana and Shamana Chikitsa, in this condition the main motive of treatment is to get back of Doshas in Koshtha in their original place. If Doshas rest in Shakha than the Raktamokshana Chikitsa is more effective than Vamana, Virechana, Basti and Shamana Chikitsa.<sup>[18]</sup>

### ISSN: 2456-3110

### Clinical significance of Kostha and Koshtha

*Koshtha* and *Prakriti* - *Prakriti Pariksha* is first step in clinical practice of Ayurveda and we can observe the *Prakriti* by the *Kostha Pariksha* because *Vata Prakriti Purusha* has *Krura Koshtha*, *Pitta Prakriti Purush* has *Mrudu Koshtha* and *Kapha Prakriti Purusha* has *Madhyam Koshtha*.

Koshtha and Shaman Chikitsa - In Shaman Chikitsa assessment of Koshtha is important to decide Aushadhi Dravyas and Aushadhi Matra. E.g., Mrudu Koshthi require Manda Virya Aushadhi and minimum dose while Krura Koshthi require Teekshna Aushadhi and large dose.

Koshtha and Shodhana Chikitsa - Basti, Virechan and Vamana are main Sodhana Chikitsha in Ayurved for Dosha Nirharna. So that there is indication of Basti, Virechan and Vaman Karma subsequently for Krura, Mridu and Madhyam Kostha because of Vata, Pitta and Kapha dominance.<sup>[19]</sup> Koshtha and Aushadhapaan-Snehapaan - In unknown Koshthi the Sneha is given in Hasyasi Matra (testing dose) as well as in Krura Koshtha Sneha is given in Uttam Matra for 7 days, while in Madhyam Koshtha we give Madhyam Matra of Sneha for 5 days and in Mrudu Koshtha Sneha is given in Mrudu Matra for 3 days.<sup>[20]</sup>

Mar-Apr 2021

**REVIEW ARTICLE** 

*Charakacharya* states that 5 *Pal Erand Tail* is essential for purgation to relief of *Udavarta* in *Krura Koshta* whereas in *Mrudu Koshtha Eranda Taila* should be taken with meal for same purpose.<sup>[21]</sup>

*Koshtha* and complication of *Shodhana Chikitsa* - If *Krura Koshthi* have taken *Mrudu Aushadha* in minimum dose, it causes the complication like *Parishtrava Roga*,<sup>[22]</sup> as well as if *Mrudu Koshthi* have taken *Teekshna Aushadha* in maximum dose than it causes the complication like *Jeevadaan*<sup>[23]</sup> and *Parikartika*.<sup>[24]</sup>

Relationship between Koshtha, Dosha, Agni, drug with dose and their common complications in Shodhana Chikitsa

Koshtha	Dosha	Agni	Shodhana Chikitsa and Shamana Dravya	Virechaka Dravya <sup>[25]</sup>	Drug and dose	Common complication in Shodhana Chikitsa
Krura	Vata	Vishama	Basti Karma and Taila- Pana	Eranda Taila, Haritaki, Triphala,	Uttam Matra and Teekshna Virya Dravya(Maximal dose with high potency)	Parishtrava Roga
Madhyam	Kapha	Manda	Vamana Karma and Madhu	Ksheera, Aragvadha, Ikshu, Takra, Mastu, Guda, Krushara, Nava Madya, Ushnodaka, Draksha	standard dose	
Mrudu	Pitta	Teekshana	Virechana Karma and Ghrita Pana	Requires <i>Kashaya</i> and <i>Tikta</i> <i>Laxatives</i>	<i>Alpa Matra</i> and <i>Alpa Virya</i> <i>Dravya</i> (Minimum dose with minimal potency)	Jeevadaan and Parikartika

### DISCUSSION

Anatomically *Koshtha* is discussed as a cavity (thoraco-abdominal cavity) *Mahastrotasa, Sharira* 

Madhya, Amashya, Pakwashaya are synonyms of Koshta. Physiologically Koshtha is divided according the dominance of Doshas Krura, Madhyam and Mridu

### ISSN: 2456-3110

Koshtha. Pathologically Kostha is Abhyantarrogmarg and total 15 diseases are described as Kosthanushari Roga. Arsha, Shotha, Gulma, Visarpa and Vidradhi are described in Shakanusari Roga as well as Koshthanusaari Roga. Kostha to Shakha Gaman of Dosha disturbed the curability of disease and Koshtha Pariksha has an important role for drugs selection and dose determination.

### **CONCLUSION**

The concept of *Kostha* has an important role on selection of drug, selection of dose of drug and selection of treatment modalities of disease. *Kostha* to *Shakha* and *Shakha* to *Kostha Gamana* of *Dosha* is important to understand the prognosis of disease. *Kostha Pariksha* is important before *Purvakarma* i.e., *Snehan Karma* and *Snehpanan*, and also in *Prdhan Karma* i.e., *Virechan* and *Shodhana Karma* as well as *Kostha Pariksha* is equally important before the *Shamana Chikitsa*.

### REFERENCES

- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 1/124, 2001;p46.
- 2. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Chikitsasthana, 25/22, 2001;p840.
- Kaviraj Atridev Gupt. Ashtang Sangrah of Shrimad Vagbhata. Chaukhamba Krishnadas Academy, Varanasi. Sutra Sthana, 1/22, 2009.
- Kaviraj Ambika Dutta Shastri. Sushruta Sanhita of Maharshi Sushruta. Chaukhamba Sanskrita Sansthan, Varanasi. Sutra sthana, 10/4, 2010;p42.
- Vaidya Laxmipati Shastri. Yogaratnakara with Vidyotani Hindi commentary. Chaukhambha Prakashana, Varanasi. Chapter 1/1, 2016;p5.
- 6. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Vimanasthana, 8/94, 2001;p758.
- Kaviraj Ambika Dutta Shastri. Sushruta Sanhita of Maharshi Sushruta. Chaukhamba Sanskrita Sansthan, Varanasi. Sharira sthana, 4/62, 2010;p49.

### **REVIEW ARTICLE** Mar-Apr 2021

- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutra Sthana, 1/8, 2001;p9
- Vaman Shivram Apte. Sanskrit-Hindi Kosha. 2nd ed.Delhi: Motilal Banarasidas Publicashers Private Limited; 1996. p.306.
- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 28/31, 2001;p550.
- 11. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 11/48, 2001;p246.
- 12. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sharirasthana, 7/10, 2001;p924.
- Kaviraj Ambika Dutta Shastri. Sushruta Sanhita of Maharshi Sushruta. Chaukhamba Sanskrita Sansthan, Varanasi. Chikitsa sthana, 2/12, 2010;p19.
- Kaviraj Ambika Dutta Shastri. Sushruta Sanhita of Maharshi Sushruta. Chaukhamba Sanskrita Sansthan, Varanasi. Uttara tantra, 42/80, 2010;p344.
- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 11/48, 2001;p246.
- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 11/49, 2001;p247.
- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Sutrasthana, 28/33, 2001;p551.
- Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Chikitsasthana, 3/289, 2001;p208.
- Kaviraj Atridev Gupt. Ashtang Sangrah of Shrimad Vagbhata. Chaukhamba Krishnadas Academy, Varanasi. Sutra Sthana, 1/49, 2016;p12.
- Kaviraj Ambika Dutta Shastri. Sushruta Sanhita of Maharshi Sushruta. Chaukhamba Sanskrita Sansthan, Varanasi. Chikitsa Sthana, 31/36, 2010;p170.
- 21. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Chikitsasthana, 26/31, 2001;p.869.

Dr. Rashmi Jaiswal et al. A conceptual study of anatomy and pathophysiology of Koshtha

### ISSN: 2456-3110

### **REVIEW ARTICLE** Mar-Apr 2021

- 22. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Siddhi-Sthana, 6/69, 2001;p1242.
- 23. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Siddhi-Sthana, 6/78, 2001;p1244.
- 24. Brahmananda Tripathi. Charak Samhita of Maharshi Charaka. Chukhambha Prakashan, Varanasi. Siddhi-Sthana, 7/56, 2001;p1257.
- 25. Kaviraj Atridev Gupt. Ashtang Sangrah of Shrimad Vagbhata. Chaukhamba Krishnadas Academy, Varanasi. Sutra Sthana, 27/30, 2016;p202.

**How to cite this article:** Dr. Rashmi Jaiswal, Dr. G. R. Chaturvedi, Dr. Sushil Dwivedi, Dr. Dileep Singh, Dr. Namrata Tiwari, Dr. Kuldeep Kumar Sahu. A conceptual study of anatomy and pathophysiology of Koshtha with its clinical importance in Ayurveda. J Ayurveda Integr Med Sci 2021;2:202-206.

Source of Support: Nil, Conflict of Interest: None declared.

\*\*\*\*\*\*\*

**Copyright** © 2021 The Author(s); Published by Maharshi Charaka Ayurveda Organization, Vijayapur (Regd). This is an open-access article distributed under the terms of the Creative Commons Attribution License (https://creativecommons.org/licenses/by-nc-sa/4.0), which permits unrestricted use, distribution, and perform the work and make derivative works based on it only for non-commercial purposes, provided the original work is properly cited.