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

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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 principles of Tridosha and Panchamahbhut Siddhanta. 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 concepts by the anatomical, physiological, pathological and clinical approach. Out of them the concept of Koshtha can be explored by the study of Koshtha and its anatomical determination, physiology of Koshtha, Koshtha Pariksha and utility of Koshtha in Sodhana and shamana 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.[1] There are many concepts in Ayurveda for the examination of Roga and Rogi Bala like Trividha Pariksha,[2] Panchavidha Pariksha,[3] Shadvidha Pariksha,[4] Ashtavidha Pariksha[5] and Dasvidha Pariksha[6] are explained by different Acharyas. The main motive of these Roga and Rogi Pariksha is to analyze the total condition of a person and pathophysiology of the disease. In Ayurveda the condition of person is said to “Dehprakriti” and Dehprakriti is decided by the dominance of Doshas.[7] According to the dominance of Dosha 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 Dosa the person is said to Krura, Mrudu, and Madhyam Koshtha respectively.[8] In Ayurveda Koshtha is anatomically a cavity formed from Aavarna which is consisting of Dhatu (solid structure).[9] Dhatu and Doshas are interchange between Koshtha to Shakha by Nidansevana.[10] Koshtha to Shakha and Shakha to Koshtha Gaman of Dosa 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
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.[11] 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).[12]

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

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)Abhyantararoga Marga (Koshthaanushari).[15]

Koshthansuri Roga

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

Dosha sancharan from the Koshth to Shakha 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.[17] 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.[18]
Clinical significance of Koshtha and Koshtha

Koshtha and Prakriti - Prakriti Pariksha is first step in clinical practice of Ayurveda and we can observe the Prakriti by the Koshtha 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 Chikitsa in Ayurved for Dosha Nirharna. So that there is indication of Basti, Virechan and Vaman Karma subsequently for Krura, Mrudu and Madhyam Kostha because of Vata, Pitta and Kapha dominance.[19]

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

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DISCUSSION

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

Koshtha and Aushadhapaan-Snehapaan - In unknown Koshtha 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.[20]

Charakcharya states that 5 Pal Eranda Tail is essential for purgation to relief of Udavarta in Krura Koshtha whereas in Mrudu Koshtha Eranda Taila should be taken with meal for same purpose.[21]

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

Madhya, Amashya, Pakwashaya are synonyms of Koshtha. Physiologically Koshtha is divided according the dominance of Doshas Krura, Madhyam and Mrudu
Koshtha. Pathologically Kosta is Abhyantarroaghmarg and total 15 diseases are described as Kosthanushari Roga. Arsha, Shotha, Gulma, Visarpa and Vidradhi are described in Shakanusari Roga as well as Kosthanusaari Roga. Kosta to Shakha Gaman of Dosa disturbed the curability of disease and Koshtha Pariksha has an important role for drugs selection and dose determination.

CONCLUSION

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

REFERENCES


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