

CONCEPT OF SHATKRIYAKAL W.S.R. MOOTRAGRANTHI (BPH): A LITERARY
REVIEW*¹Dr. Priyanka Bansod, ²Dr. Prerana Khedkar and ³Dr. Nirmala Sawarkar¹Assistant Professor, Dept. of Kriyasharir, Om Ayurved Medical College, Betul, Madhyapradesh.²Associate Professor, Dept. of Kriyasharir, Bhausaheb Mulak Ayurved College, Nandanvan, Nagpur, Maharashtra.³Associate Professor, Dept. of Shalyatantra. LN Ayurved College, Bhopal, Madhyapradesh.

*Corresponding Author: Dr. Priyanka Bansod

Assistant Professor, Dept. of Kriyasharir, Om Ayurved Medical College, Betul, Madhyapradesh.

Article Received on 21/06/2021

Article Revised on 11/07/2021

Article Accepted on 01/08/2021

ABSTRACT

The Ayurvedic perspective on health is truly holistic, treating body, mind, spirit and senses as inextricably interconnected. Many siddhantas are explained in Ayurveda, shatkriyakala is one of them. Sushruta has given the concept of shatkriyakala (six stages of disease evolution for treatment interventions). These are nothing but the six distinct formative patterns or stages of manifestation of diseases. Mootragranthi is a disease of Mootravahasrotasa, one among the 12 types of Mootraghata disorders,^[1] elaborated by Sushruta in his seminal work, the Sushruta Samhita. Mootragranthi closely resembles benign prostatic hyperplasia (BPH) of modern medicine in its signs and symptoms. Shatkriyakala (six stages of progress of a disease), on the other hand, provides a framework to assess the mootragranthi and its pathogenesis in different stages. Each stage has its own characteristic symptoms to enable a treating physician to recognize the disturbance at the early formative stage of the disease. The present review describes the six stages of Shatkriyakala in detail in the disease of mootragranthi, with an emphasis on research areas to validate the concept of Shatkriyakala with special reference to mootragranthi.

KEYWORDS: Shatkriyakala, Mootragranthi, BPH, Sushruta samhita.

INTRODUCTION

The Ayurvedic perspective on health is truly holistic, treating body, mind, spirit and senses as inextricably interconnected. A healthy person is defined as someone whose doshas must be in equilibrium, the digestive fire is in balanced state and the tissues and wastes working in a normal, balanced state.^[2] Whereas modern medicine also described that one has to maintain homeostasis so as to remain in healthy.

Many siddhantas are explained in Ayurveda, shatkriyakala is one of them. Sushruta has given the concept of shatkriyakala. Shatkriyakala means six stages of disease evolution for treatment interventions.^[3] It describes the mode and stages of the development of the disease. It is one of the most important Ayurvedic principle explaining not only the stages of disease manifestation but also treatment approach in detail. Acharya Sushruta has described the concept of Kriyakala in Vranaprashnadhyaaya of Sushrutasamhita. This adhyaya seeks to explain the incidence of Vranas in terms of Doshic disturbances.^[3]

The word *Kriyakala* comprised of two words *Kriya* and *Kala* in which *Kriya* means treatment or action and *Kala* means time. It gives the idea about present condition of

Doshadushti and also the progress of disease in the body. Hence *Kriyakala* means the time of treatment or opportunities in the process of disease manifestation.

To cure the disease completely, knowledge of shatkriyakala or samprapti is essential. Samprapti has six stages from the accumulation of doshas till the disease is completely manifested. Acharyas has described these stages in the following way.

1. Sanchaya or Chaya awastha (stage of accumulation)

In sanchay awastha, disturbed doshas start accumulating in their own place and produces dislike for things which are the causes of increase and liking for things of opposite qualities. In this stage mild symptoms are seen. If we treat the disease at this stage, the disease does not spread further.^[4]

Table explaining Chaya Awastha.^[4]

Chaya	Site	Symptoms	Desire of Opposite Qualities of Dosha
Vata	Pakvashaya	Stabdhapurna koshtata	Ushna, Snigdha & madhur
Pitta	Grahani	Pitavbhasata	Madhur, Sheeta
Kapha	Amashaya	Mandoshmata, Gaurav	Langhan

This is the first opportunity of the treatment. This is the reason why it is said that if we treat this stage correctly we can win over the disease.^[5] Primary features are often ignored by the patients and physicians both. Hence the first opportunity of the treatment is lost. If this stage is observed and proper interventions are done, then the disease progression can be prevented or disease with mild symptoms will occur.

2. Prakopa Awastha (Stage of Aggregation)^[6]

In this stage, the doshas go on accumulating if causative factor persists. Then *Sanchayit Doshas* lands in *Prakopavastha*. Acharya Dalhana's definition of *Prakopa* is extended state of *Chaya* in which *Doshas* are in a state which has developed the ability to move from their respective sites.^[7]

- In Vata prakopa, Hyper peristalsis is observed i.e. food passes very rapidly through the stomach and intestine.
- In pittapropka, water brash, polydipsia (frequency in drinking water) burning sensation is observed.
- In kapha prakopa the person feels nauseated about food and heaviness in chest is observed.

Acharya Vagbhata defines *Prakopa* as *Unmargagamita* i.e., *Doshas* just started upward movements in their respective places⁸. This is the second opportunity of management if diagnosed at this level. These signs may appear due to the micro inflammatory process in the tissues, which forms the backbone for the disease process. Management suggested is the pacification of aggravated dosha by use of dissimilar diet or lifestyle.

3. Prasara Awastha (Stage of Spread)^[9]

In this stage, the doshas are hyperactivated and they leave their site and start spreading throughout the body. If milk is kept for boiling in a vessel, after some time, it comes up to the brim and then if not removed spills out. Similarly doshas leave their place and spread throughout the body.

- In vata prasara, doshas change their place and move in any part of the body. A person experiences tympanitis.
- In Pitta prasara, body temperature is raised and burning sensation is sensed.
- In Kapha prasara, the person experiences fatigue, indigestion tastelessness and nausea.

At this stage, The dosha may return back to normalcy and to their normal sites, and stop further progression, if they are vitiated in the first two stages. And this can be happened either naturally (swabhavik) or due to the

employment of appropriate therapeutic measures. Thus, leading to the absence of disturbances (vikaras)^[10] Thus, this third stage of disease manifestation (3rd kriyakala) is a turning point for the next phase of disease evolution.

4. Sthanasamshraya (Stage of Localization)^[11]

In this stage the aggravated doshas attack the dusya or weak tissues or waste products & disease is manifested. In this stage the prodromal symptoms (purvarupa) starts appearing. In this stage the disease starts progressing but a disease will not appear evidently because this is the budding stage of that disease. The type of disease depends on where the doshas have accumulated. Depending on the type of channel these doshas attacks and various type of diseases like fever, diabetes mellitus, BPH etc. occurs.

Regarding *Sthanasanshraya*, Acharya Madhavkara has stated that this stage of *Kriyakala* is easy to recognise due to presence of *Purvarupas* (Prodromal symptoms) of a particular disease. Hence this is the most important stage regarding treatment of any disease¹². Practice for the nidanparivarjana i.e. avoidance of impairing factors listed specifically for all the different 13 major srotas involved Rejuvenation by rasayana therapy are the key treatment.

5. Vyakti (Stage of Manifestation)^[13]

In this stage the disease expresses itself as a result of invasive interaction of morbid factors into defensive healthy tissues (dosha-dusya sammurcchana). Here the disease can be diagnosed easily and can be named properly. Sushruta has described this stage as occurrence of disease.

In this stage proper symptoms or Rupa appears, therefore particular disease expresses particular sign and symptoms. Restoration of normalcy is the modality suggested.

6. Bheda (Stage of Differentiation)^[14]

This is the last stage of kriyakala. In this stage, the disease can be diagnosed correctly and its doshaja type can be decided. e.g. Pittaja diarrhea where pitta is predominant. This is the stage of differentiation or termination. When disease further progresses, it may produce complications becoming incurable or severe complications leading to death or may cause temporary/permanent disability. Otherwise in self-limiting disorders, the disease may get cured itself by body and rehabilitation will be required. That is why there is a importance of this stage in recognizing the prognosis. In this stage, disease becomes sub-acute, chronic, or

incurable This is the last opportunity of the management, where all the possible management is to be applied.

Mootra Granthi / Rakta Granthi^[15]

Mootragranthi is a disease of Mootravahasrotasa, one among the 12 types of Mootraghata disorders elaborated by Sushruta in his seminal work, the Sushruta Samhita. Mootragranthi, as described in Ayurveda, closely resembles benign prostatic hyperplasia (BPH) of modern medicine in its signs and symptoms.

According to possible explanation on modern lines, Mootragranthi can be grouped under Organic disturbances, where the symptoms of retention of urine, increased frequency of micturition, distension of abdomen and mass felt per rectum are due to a growth either in the bladder, urethra, prostate or other growths, which is completely based on thorough discussions.

Synonym: Raktagranthi.^[16]

Definition: It is the knot or induration around the neck of bladder. (M. William) When a serious kind of tumour at the neck of bladder owing to obstruct the urine and passes urine with difficulty similar to the condition of ashmari in the urinary passage, then it is called Raktagranthi.^[16]

Etiology

The specific factors have not been mentioned so far but those responsible for Mootrakrichha are also account for causing Mootraghata and ultimately to Mootragranthi or Raktagranthi.

Acharya Charaka has specially mentioned the vitiated vata, kapha and Rakta as responsible factors causing Mootragranthi. (Ch.Si. 9/41)

Vijay-Rakshit has stated that voluntarily suppression of natural urges of mutra-purish and shukra along with ruksha, ushna diet etc may lead to Mootraghata and Mutragranthi ultimately.^[17]

Pathology

It has been briefly described by Charaka only. As mentioned earlier in Mootraghata the vata particularly Apana is only responsible for creating the pathology.

The rakta vitiated by vata and kapha and caused Darun granthi i.e. serious kind of tumour at Bastimukha owing to obstruct the urine and passage of urine with difficulty.^[18]

The process would be passed from stage to stage. These are timely mounded and called as Kriyakala. (Su.Su.21). Pathogenesis of a disease could be well understood with the help of Shatakriyakala as it explains the disease in stages right from the incubation period to the complete manifestation and later consequences.

1. Sanchaya

This is the initial accumulation of a Dosha due to individual vitiating factors. Mootravegavarodha has been mentioned as one of the prime Nidana in almost all the types of Mootraghata. The Apana Vayu being vitiated by indulging in the afore mentioned Nidanans starts accumulating in its own places- the Kati, Basti, Pakwashaya and Medhra. Along with this the bodily Vayu is vitiated by Vatakara ahara and Vihara. There may be feeling of Adhmana and Atopa in Vata Pradesha along with a very mild discomfort in passage of urine.

In this stage, the person presents with vague symptoms like diminished appetite, constipation, followed with intermittent loose motion, dull ache in thighs, vrushan, medhra, basti. As these symptoms seems to be tolerable, patient neglects it. Hence the physician has to be clear enough to elicit the history and symptoms to prevent further vitiation. If not, the symptom will not seem to be those of the Mootravaha Srotas and treatment can be missed altogether.

2. Prakopa

The early pathogenesis of disease starts if the provocative factors are allowed to act upon further wherein there will be further vitiation of Vata. This vitiation occurs in all the Vata places and leads to hampering of the functioning of both Pitta and Kapha in terms of "Vishamagni" which lays the foundations for the production of Ama. Here, again the symptomatology experienced may not be directly related to Mootravaha Srotas but rather to those of initial Ama formation i.e. Amlika, Pipasa etc. and further Adhmana and Atopa. Only an experienced physician can foretell the consequences because there is no clear cut picture of involvement of the Mootravaha Srotas.

4. Prasara

In this stage, there will be the spread of the vitiated Doshas along with Ama from their locations to the other sites and therefore a mixed symptomatology may be found. The manifestation of the Laxanas due to Ama such as Avipaka, Paridaha, Arochaka, Agnisada etc. happened. In this stage, the Laxanas related to Mootra may be more pronounced than the previous stages, with increased difficulty in micturition. But, Because the process is still in incubation phase, symptoms are not supposed to be easily distinguished either by physician or patient.

5. Sthana Samskraya

In this stage, the premonitory features of a disease are manifested and it is this stage in which only the vitiation of Dhatus starts. The vitiated Doshas along with Ama traversing through the Sukshma Siras, Dhamanis get lodged in Basti and forms a base for the complete manifestation of Mootraghata.

Acharya Charaka states that Ama after attaining its seat in Basti causes Basti Rogas.^[19]

According to Acharya Dalhana in this stage, the preliminary symptoms are manifested. This is also called as the stage of purvarupa. (Dalhana Su 21/23).

6. Vyakti

It is a corner stone in the process of samprapti., where complete manifestation of a disease sets in. The disease could be ascertained on the clinical picture of the disease. Each and every symptom of individual variety of Mootraghata is identified in this stage. This is also known as Rup Avashta.

The occurrence of sudden cystic swelling at the orifice of bladder exhibitance of characteristic pain and presence of clinical symptoms of urinary calculi along with the sudden obstruction to urine flow may be observed in patient. (Su. Utt.58)

7. Bheda

If the disease is miss-diagnosed and miss-managed or properly not treated in the various stages, they proceed towards complications and involvement of other bodily systems thereby complicating the management, probably due to extensive damage sustained or irreversible structural changes having taken place, on account of the negligence of early diagnosis and prompt treatment. In Mootraghata, there may be Acute obstruction or Chronic obstruction followed by Incontinence, Haematuria, Diverticula formation, Ureteral Dialation and Ascending Hydronephrosis there by leading to fatal outcome.

DISCUSSION

According to modern science the diseases are diagnosed when pathological, biochemical manifestations have surfaced. According to Ayurveda, Sushruta has given the concept of shatkriyakala (six stages of disease evolution for treatment interventions) which may explain the progress of the disease in its earlier stage. At later stages, many times it is difficult to reverse the pathogenesis and prevent the various illnesses.

Kriyakala is also known as *Chikistavasara Kala* (Proper time for treatment). If the vitiation of *Doshas* is in earlier stage, then by proper history taking of any disease, adopting simple treatment measures like shodhana therapy, Rasayana therapy and lifestyle changes in diet, one can stop the *Dosha* from moving to the next stage of *Shatkriyakala* and can also prevent the complications of disease and prevent it from being untreatable. Therefore one should not neglect *Kriyakala*.^[20]

CONCLUSION

Sushruta has given the concept of shatkriyakala (six stages of disease evolution for treatment interventions) which may explain the progress of the disease. By understanding the stages in a definite sequence the disease is diagnosed earlier. One can prevent the formation of disease if the initial stages are diagnosed correctly.^[21] Mootragranthi is a disease

of Mootravahasrotasa, elaborated by Sushruta closely resembles benign prostatic hyperplasia (BPH) of modern medicine in its signs and symptoms. The holistic knowledge of Ayurveda can be utilized with modern technologies for many diseases like mootragranthi w.s.r. different stages of shatkriyakala. Different types of treatment modalities are available in ayurveda for different stages. The physician can successfully cure the patient and prevent the recurrence of the disease.

REFERENCES

1. Ambikadutta Shastri, Susrutsamhita, uttar 58/3-4, Chaukhambha Sanskrit Sansthan Varanasi; Editor reprint, 2008; 787.
2. Vaidya Yadavji Trikamji, Susruta Samhita with commentaries Nibandha samgraha by Dalhana and Nyayacandrika by Gayadasa, Sutra Sthana chapter 15/3, Chaukhamba Surbharti Prakashan, Varanasi, reprint, 2012.
3. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/36, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 121.
4. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/18, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 117.
5. Dr Brahmanand Tripathi, Ashtang hridaya of Vagbhata edited with Nirmala Hindi commentary, sutra sthana; 13/15, Chaukhambha Sanskrit Pratishthan Delhi, 2014; 186.
6. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/27, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 119.
7. Vaidya Jadavaji Trikamaji, Sushruta Samhita sutra sthan 21/24, with Nibandhasamgraha Commentary, Choukhamba Orientalia, Varanasi, 2007; 104.
8. Kaviraj Atrideva Gupta, Astanga Hridayam sutra sthan 12/22, Hindi Commentary, Choukhamba Prakashan, Reprint, 2007; 92.
9. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/32-33, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 120.
10. Dr Brahmanand Tripathi, Ashtang hridaya of Vagbhata edited with Nirmala Hindi commentary, sutra sthana; 12/24, Varanasi: Chaukhambha Sanskrit Pratishthan Delhi, 2014; 175.
11. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/33, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 120.
12. Shastri Sudarshana, Madhavnidana of Madhavkara, Vidyotini Hindi Commentary, Choukhamba Publications; 36.
13. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/34, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 121.
14. Shastri AD, Sushruta Samhita vol-1, sutra sthana; 21/35, Chaukhambha Sanskrit Sansthan, Varanasi, 2014; 121.
15. Ambikaduttashastri, Sushrutsamhita, uttartastra 58/1, Chaukhambha Sanskrit Sansthan Varanasi, 2008; 787.

16. Yadavaji Trikamji, Charak Samhita - Chakrapanis Ayurveda Dipika Sanskrita Commentary, Siddhi sthana Chapter 9/16, Chaukhambha Subharati Prakashana Varanasi, 649.
17. Shastri Sudarshana, Madhavnidana of Madhavkara, chapter 1, Vidyotini Hindi Commentary, Choukhamba Publications.
18. Dr. Subhasha Ranade, Ashtanga Sangraha-Marathi Translation, Sutra sthana 20/1, Anamol Prakashan, Pune, 2002; 268.
19. Dr. Brahmanand Tripathi, Charak Samhita edited with Nirmala Hindi commentary, sutra sthana; 13/15, Varanasi, Chaukhambha Sanskrit Pratishthan Delhi, 2014; 18.
20. Lalitkumar V. Vithalani, Bhagyashri V. Sakharkar, Sanjay A. Dalvi, Ayushdhara, Shatkriyakala with special reference to homeostasis and pathogenesis - A brief review.
21. Dr. Subhash Ranade, Dr. R. Deshpande, Dr. Swati Choubhe, A Textbook of kriya sharira part 1, chapter 8, reprint, 2015; 131.
22. Khandel S.K, Baghel M.S, Concepts and Contemporary Practices-Shatkriyakala.