

PHYSIOLOGICAL SIGNIFICANCE OF THE *KRIYAKALA*Dr. Nisha Jakhar^{1*}, Dr. Rajesh Kumar Sharma² and Dr. Dinesh Chandra Sharma³¹P.G. Scholar, P.G. Department of Kriya Sharir, DSRRAU, Jodhpur, Rajasthan, India.²Professor and H.O.D., P.G. Department of Kriya Sharir, DSRRAU, Jodhpur, Rajasthan, India.³Associate Professor, P.G. Department of Kriya Sharir, DSRRAU, Jodhpur, Rajasthan, India.***Corresponding Author: Dr. Nisha Jakhar**

P.G. Scholar, P.G. Department of Kriya Sharir, DSRRAU, Jodhpur, Rajasthan, India.

Article Received on 13/10/2022

Article Revised on 02/11/2022

Article Accepted on 23/11/2022

ABSTRACT

The term *Kriya Kala* refers to the recognition of the stage of a disease's Progress. This concept is mostly compared with disease Pathogenesis. *kriyakala* means the time of treatment or interception in the process of disease manifestation. *Acharya Susrutha* has narrated detail idea of *Shatkriyakala* in 21st chapter of *Sutrasthana*. *Shatkriyakala* include six stages viz *Sanchaya*, *Prakopa*, *Prasara*, *Shansamshraya*, *Vyaktavastha* and *Bhedavastha*. That means 6 (the number Six). *Kriya* means Action or treatment. *Kala* means Time or period. So *Shatkriyakala* means 'Appropriate time Periods to take action/treatment. The *Prayojana* of *Ayurveda* is of two types, Maintenance of health a healthy Person, by adopting the *Ritucharya*, *Dincharya* and *Sadvritta* and curing of a disease of diseased Person, by adopting therapeutic measures.^[1] Before Studying the Pathological conditions of the body, a Physician has to first study the occult function and structures of the body on the basis of *dosha*, *dushya* and *Srotas*. At that time *kriya Kala* helps the doctor to adopt line of treatment by Seeing the vitiated *dosha* condition by his intellect and knowledge.^[2]

KEYWORDS: *Kriyakala*, *Dosh*, *Dhatu*, *Mala*, *Ayurveda*, Health.**INTRODUCTION**

Prevention is better than cure has always been a golden standard and underlined principle for health. Good quality, quantity and timely balanced diet, good sleep, sex and exercise, freedom from stress and extremes of emotions, attending the urges when they get manifested, making a protocol and adapting *Dinacharya* (Rules of daily living) and *Ritucharya* (Rules of seasonal living) etc. help in preventing a wide array of diseases. This is one dimension of the prevention of illness. The other dimension of prevention is 'an early diagnosis of the disease in its budding stage itself'.

Any branch of medical science which deals with preventive and curative aspects should have deep knowledge about the stages of pathogenesis. According to *Ayurveda*, diagnosis is not always in terms of the name of the disease but in terms of the nature of the phenomenon of the disease.

The art of understanding disease and its stages of pathogenesis was probably explained for the first time in *Ayurveda* in a very comprehensive way. *Acharya Sushruta* beautifully illustrates the stage of development of a pathological process under the nomenclature

Kriyakala. These stages are called *Shat kriyakala* - 6 time periods for managing a disease.

The term *Kriyakala* refers to recognizing the stage of disease progression. This concept is compared chiefly with disease pathogenesis. *Kriyakala* comprises two words. *Kriya* means action or treatment. *Kala* means time or period. Thus, it is the time for proper step or interception in disease manifestation.

The term *Kriyakala* is also known as *Chikitsa avasara kala*, denotes the stage of the necessity of treatment.^[3]

Importance of *Shat kriyakala*

It gives us the knowledge of diagnosis, prognosis, and intervention level. • It gives information about the time of treatment in the process of disease manifestation and prevents the establishment of disease. • These stages give us an idea regarding the state of the disease in the body, and it guides us when to intervene and where to intervene.

Classification: *Kriyakala* is divided into *Ritu kriyakala* and *Vyadhi kriyakala*.

Ritu kriyakala

The natural changes occur to Dosha according to the season. The *Ritu kriyakala* is explained by Acharya Vagbhata, Charaka and Susruta.²⁻⁴ In *Grishma Ritu*, owing to the nature of *Ritu* and *Aharadi gunas* which are identical to the qualities of *Vata*, will result in *Vatachaya*. Since the season is hot, which is antagonistic to the *Sita* property of *Vata*, *Prakopa* of *Vata* does not happen. It undergoes *Prakopa* in *Varsha* and become pacified in *Sarath*. In *Varsha Ritu*, due to *Amla vipaka* of *Jala* and *Aharadi guna*, *Pittachaya* occurs. But as the season is *Sita*, it does not attain the *Prakopa* stage.

In contrast, it undergoes *Prakopa* in *Sarath* and becomes pacified in *Hemantha*. Similarly, in *Sisir Ritu*, *Kapha chaya* occurs due to *Snigdha* and *Sita guna*. Even though *Deha* and *Kala* favour the increase of *Kapha* by similar properties, it does not attain *Prakopa* due to its solid nature. But it attains *Kopa* in *Vasanth* and gets pacified in *Grishma Ritu*. These three stages of *Doshas* happen due to the influence of changes occurring in the season. If a person adopts the existing *Ritu – Ritucharya* (Rules of seasonal living), *Doshas* will be brought back to the normal stage.

Vyadhi kriyakala

Sequential progression of a disease. The *Vyadhi kriyakala* is explained in 6 stages. This is known as *Shat kriyakala*.

1. *Sanchaya*- Stage of accumulation
2. *Prakopa*- Stage of vitiation
3. *Prasara*- Stage of dissemination
4. *Sthanasamsraya*- Stage of localization
5. *Vyakti*- Stage of clinical symptoms
6. *Bheda*-Stage of complication

It can be otherwise classified based on the criteria for treatment as.

- *Dosha kriyakala* including *Sanchaya*, *Prakopa* and *Prasara*.
- *Vyadhi kriyakala* including *Sthana samsraya*, *Vyakti* and *Bheda*.

Sanchaya (Stage of accumulation)

Sanchaya, the first stage of *Kriyakala*, describes the collection or accumulation of *Doshas* due to various causative factors.^[4] In this stage, *Doshas* accumulate but do not leave their own place (e.g. *Vata* builds up in the bones, *Pitta* in the blood and *Kapha* in the lymph and muscles). The etiology of *Sanchaya* can be of either *Kala Swabhava* (natural) or *Trividha Hetu* (three causative factors). The three causative factors are *Prajnaparadha* (misleading), *Asatmendriyartha Samyoga* (improper use of sensory organs) and *Vyapanna Hetu* (inherent cause).^[5] which include seasonal changes, day-night changes and changes in food and regimen. In this stage there will be hatredness towards the similar *Gunas* as that of the *Sanchitha Dosha* and desire towards the opposite one.^[6] For instance in case of *Vata Sanchaya* there will be hatredness towards *Ruksadi*

Dravyas and desire towards *Snigdhadri Dravyas*. Due to which *Sanchitha Dosha* can be assessed.

Prakopa (Stage of aggravation)

In *Prakopa* (vitiation) stage, the accumulation stage has persisted for a long time and the responsible factors have been continuously present. This stage occurs while the *Dosha* are ready to move from their own place to another.^[7] On the basis of this observation, it is assumed that the *Prakopa* stage is developed due to continuous intake of improper *Ahara* (food), *Vihara* (regiment) and *Aushadha* (medicine). The *Dosha Vriddhi* (increase in biological humours) occurs in a liquid state at its own place which is of two types, i.e., *Chayapurvaka* and *Achayapurvaka Prakopa*. *Chayapurvaka* describes reaching *Prakopa* after passing through *Sanchaya*, whereas *Achayapurvaka Prakopa* is characterized by reaching *Prakopa* without prior accumulation. In *Achayapurvaka Prakopa*, although *Doshas* become abnormal, the damage caused by these abnormal *Doshas* can be curable. The *Prakopa* stage can be diagnosed on the basis of continuous *Chaya Lakshanas* (features of aggravated biological factors), desire for opposite *Gunas* (fundamental attributes) and aversion to similar *Gunas*.

Prasara (Stage of spread)

Prasara is a stage of spreading, in which the causative factors continue and *Prakopa* stage has affected the *Doshas*. In *Prakopa* stage, the *Doshas*, which have remained in the place so far, become ready to move. Now in *Prasara* stage, the *Doshas* overflow and spread or move to other areas or organs of the body. Acharya Sushruta explains this stage by giving simile of “*Kinvodaka- Pista Samyoga*”. *Kinva*, *Udaka* and grinded rice grains are mixed and kept in a vessel all over the night leading to fermentation process. This fermentation leads to spreading of the contents out of the vessel in the same way the aggravated *Doshas* starts spreading from its abode. The pathogenesis of *Prasara* stage has been described in most of the *Samhitha* (ancient texts) due to its significance in the manifestation of a disease. In this stage, *Doshas* spread all over the body starting from sole to the cerebrum. *Pitta* and *Kapha Doshas*, as well as *dhatu* and *malas* are inert substances and can be increased in quantity but cannot move from one place to another. *Vata Dosha*, on the other hand, helps to move *Pitta*, *Kapha*, *Dhatu* and *Malas* to other places. Thus, it appears that the *Vata* is a key factor that mediates the *Prasara* stage in the disease manifestation process. In this stage, the vitiated *Doshas* continuously spread outside of their normal sites unless the causative agent is treated. However, failing to treat causative factors at this stage can lead to irreversible pathogenesis. In *Prasara* stage, diagnosis can be made with the help of clinical involvement.

Sthanasamsraya (Stage of localisation)

Sthanasamsraya (localization) or the settlement of *Doshas* at a particular place occurs when vitiated *Doshas* are circulating and settle in areas of *Srotovaigunya*

(depletion of tissue). Certain causative factors which have enough potential to cause damage are responsible to settle *Doshas* at a particular site. There are only few sites called *Khavaigunya* (weak or defective site), which are prone to the settlement of *Doshas*. These weak or defective sites may have tissue depletion or certain disturbances in their normal surface. Furthermore, a specific causative factor may have an affinity towards particular channels or tissues, which leads to a defective site on the manifestation of a disease. The localization of *Doshas* at sites in the abdomen produces disorders related to the stomach and urinary bladder. When the *Doshas* are localized in the skin, muscle or blood, the condition may lead to skin diseases like leprosy, whereas localization in fatty tissues of the body causes cysts, tumor and goitre. It suggests that a particular disease is produced by the localization of *Dosha* at a particular site of the body. All the etiological factors may not be causative for a disease; every tissue of the body may require its own etiological factor related to particular involved *Doshas* and *Dusyas* (body tissues, i.e., *Rasa*, *Rakta*, *Mamsa*, *Meda*, *Asthi*, *Majja* and *Shukra*). For example, a particular pathogen has a specific affinity towards a particular tissue, where it causes a disease. It is assumed that an exogenous factor itself by triggering *Dosha* causes tissue depletion which can be called as the foundation of a disease. Besides, if *Khavaigunya* already exists at the time of *Dosha Prakopa* (perhaps due to *Dhatu Kshaya* or depletion of body tissue), in such conditions, the *Doshas* may cause any kind of disease. In such conditions, the union of *Doshas/Dusyas* at a particular site is called *Sthanasamsraya*.

Vyaktha (Stage of manifestation)

If the causative factors present in *Sthanasamsraya* are not treated and continue, *Dosha* enters into *Vyakthi* (manifestation) stage, in which all the symptoms of a disease appear, hence called *Rupa Avastha*. A particular disease depends upon the vitiation of a particular *Dosha* and the interaction of a particular *Dhatu* (body tissue), as well as the extent of their mixture.

Bheda (Stage of chronicity)

Bheda is the final stage where the progression of a disease reaches an end. Complications from living with a disease may bring about other diseases, and finally may lead to death.^[8] In this stage, the disease is usually diagnosed by its complications; the treatment of both the disease and its complication has to be done otherwise the treatment may not be possible. However, in *Bheda*, the survival rate is generally decreased.

DISCUSSION

Due to various factors the *doshas* in the body undergo vitiation or morbid changes which initiate the process of disease manifestation. It is clear from the above description that various changes involved in the disease manifestation process take place in distinct steps. As the vague symptomatology is expressed in the early stages of disease manifestation procedure, it is necessary

for the individual that he or she should be aware of the changes occurring in the body. So a good knowledge of the concept of *Kriyakala* is very essential for early recognition of the disease procedure. If the deranged *doshas* are left unrecognized and untreated, they will gain the strength for their further development. The diseases manifested in a particular stage of *kriyakala* may even precipitate some other diseases in the name of *Nidanarthakara-rogas* if left ignored.

CONCLUSION

In this study, the importance of *Kriyakala* in early diagnosis and for adopting preventive and curative measures is highlighted from the description available in *Ayurvedic* classics. The concept of pathogenesis of disease available in modern medicine may also be evaluated in further study for which better and recent advancement in the field of preventive medicine may also be considered.

REFERENCES

1. A text book of Ayurvedic Physiology by Prof S.B Kotur and Dr. Shashikala Kotur, Choukhambha orientalia Varanasi.
2. Susrutha Samhita by Ambikadutt Sastri ch 21, by choukhambha Sanskrit Prakasana Varanasi.
3. Yadavaji Trikamji ed. Sushruta Samhita of Sushruta sutra sthana (Nibandha sangraha, Dalhana, commentary, Sanskrit) Varanasi: Chaukhambha, 2015; 103-106.
4. Gupta KA. Astanga Hridayam, Hindi Commentary Varanasi: Choukhamba Prakashan, 2007; 91. Hindi.
5. Paradara HSS. Ashtanga Hrudaya with Sarvangasundara commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri. 9th ed. Varanasi: Chaukhambha Orientalia, 2011; 13.
6. Paradara HSS. Ashtanga Hrudaya with Sarvangasundara commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri. 9th ed. Varanasi: Chaukhambha Orientalia, 2011; 195.
7. Paradara HSS. Ashtanga Hrudaya with Sarvangasundara commentary of Arunadatta and Ayurvedarasayana commentary of Hemadri. 9th ed. Varanasi: Chaukhambha Orientalia, 2011; 196.
8. Bhosgikar A. A review on Shatkriyakala. Int Ayurved Med J., 2014; 2: 318-324.s