



Review Article

KALA (TIME): THE CRUCIAL ELEMENT IN UNDERSTANDING HEALTH AND DISEASE IN AYURVEDA

Parvathy Prakas Seethalekshmy^{1*}, Leena Parameswaran Nair², Meera Esanamangalam³, Haritha Chandran⁴

*¹PG Scholar, ²Professor & Head, ³Associate Professor, ⁴Associate Professor, Department of Maulika Siddhanta (Basic Principles of Ayurveda), Amrita School of Ayurveda, Amrita Vishwavidyapeetham, Amritapuri, Kerala, India.

Article info

Article History:

Received: 26-01-2025

Accepted: 22-02-2025

Published: 20-03-2025

KEYWORDS:

Chrono-therapeutics, *Kala*, *Oushadhakala*, *Shadkriyakalas*, Time.

ABSTRACT

Time or *Kala* is the principal reason for the continuous cycle of birth and death among organisms and Ayurveda has given great importance to *Kala* for the healthy as well as the diseased. *Kala* is one among the *Navakarana dravyas* and is also known as *Parinama*, as everything in this universe undergoes change with time in a definite order. Ayurveda considers *Kala* as *Kshanadi* and *Vyadhyavastha*. Susruthacharya takes time as *Dina Ritu Kala*, where *Dina* is *Poorva* and *Aparahna* and *Ritukala* as *Adana* and *Visarga kala* comprising of *Shadrtus*. The *Shadkriyakalas* explained in the classics also implies the importance of giving medications in time so as to prevent the pathogenesis of diseases. Similarly, *Kala* plays an important role in *Vyadhyavastha*, for obtaining the prognosis of a disease. The *Oushadhasevanakalas* mentioned in *Brihatrayees* are very important for the successful treatment of *Vyadhis*. The *Heena*, *Mithya* and *Athiyogas* of *Kala*, *Artha* and *Karma* are the prime causative factor for diseases. Even in ascertaining the *Prakriti* of an individual, time has a very crucial role. Thus, *Kala* is invariably connected to an individual - whether in preventive or curative aspects.

INTRODUCTION

Kala (time) has been described in Ayurveda as a factor which has neither a start nor an end, it is *Svayambhu* ^[1] (self-originating). The change resulting from an earlier situation to present situation is known as *Kala* so it is also known as *Parinama* ^[2] (change). Everything in the universe or cosmos is subject to change. *Kala* is responsible for life and death of all living beings and is responsible for the manifestation of tastes in various *Dravyas* (objects). For remaining *Swastha* (healthy), it is important to know about the importance of timely food, exercise, rest, sleep etc and only if a person has *Vijnana* (knowledge) about *Desa* (place), *Kala*(time), *Atma*(soul) along with *Smṛti* (memory), *Sadvrittanuvartana* etc, he can remain free of diseases.

In the perspective of diseases, *Kala* has a very crucial role as it controls the etiopathogenesis, prognosis and management of diseases. It is one among the *Trividha hetus* ^[3] (three types of reasons) of diseases. The major classification of diseases is based on *Kala* only - *Kalaja* ^[4] (timely) and *Akalaja vyadhis* (untimely diseases). Timely collection of drugs, processing, preserving and also administration is important for getting correct treatment results. Also, a good physician should have a thorough understanding of the effects of *Kala* and the importance of time in disease progression and treatment planning. Consequently, a *Bhishak*, or physician, is often referred to as *Kalavith* ^[5] (knower of time). Acharya Dalhana has explained that time is that factor which takes a person nearer to death, meaning that time is unstoppable ^[6]. *Kala* is that which joins living things with pleasure and pain. Considering all these, Acharya Susruta has taken *Kala* as *Bhagavan* ^[7] (God) itself.

Access this article online

Quick Response Code



<https://doi.org/10.47070/ayushdhara.v12i1.1856>

Published by Mahadev Publications (Regd.)
publication licensed under a Creative Commons
Attribution-NonCommercial-ShareAlike 4.0
International (CC BY-NC-SA 4.0)

MATERIALS AND METHODS

This is a conceptual type of study. References related to the concept of time have been gathered and compiled from various Ayurvedic texts and their important commentaries. Additionally, online literature and research articles were sourced from databases such as PubMed, Scopus, Ayush Research Portal, Dhara, Google Scholar, and others. Based on this information the preventive and curative features of time factor and its importance in Ayurvedic clinical practice is outlined in this article.

RESULTS AND OBSERVATION

Kala - Preventive Aspects

Kala is mainly divided into 2 types- *Nityaga* [8] and *Avasthika kala*. So, taking *Ahara viharas* (food and regimens) as per *Samvatsara* (year), *Rtu* (season) etc can provide more importance in the preventive aspects of *Rogas* (diseases). A *Samvatsara* contains two *Ayanas* (pathways)- *Uttarayana (Adanakala)* and *Dakshinayana* [9] (*Visargakala*). These are again divided into 6 *Rtus* from which the concept of *Rtukala* arises. A specific plan of *Aharaviharas* is mentioned for the *Shadrtu* (six seasons) for the proper maintenance of *Doshas* and for good health. Thus, the concept of personalised diet and regimens in Ayurveda has its base upon the concept of *Kala* itself.

Right from the time of conception, *Kala* plays an important role in determining the *Prakriti* (constitution), *Ayu* (life) etc of an individual and the 4 factors *Rtu* (fertile period), *Kshetra* (reproductive organs), *Ambu* (nourishment) and *Beeja* (male & female gametes)[10] has to align themselves properly for this. The conception of a child occurs only if the time factor synchronises with all the rest of the three. According to Acharya Caraka, *Prakriti* is mentioned as *Kalanupatini* [11] as it changes according to different *Yugas* or *Kala*.

The *Tridoshas* (3 humours) in our body is affected by the effect of *kala* and undergoes increase and decrease according to the *Dinakala* [12] (daytime). *Vata* is seen raised in the end of *Vayas* (lifespan), *Ahas* (day) and *Ratri* (night); and *Kapha* vice versa and *Pitta* in the middle. This means that the physiology of a human body depends on time, whether it be day to day activities or ageing process. So, planning diet and regimens in accordance with this normal increase and decrease of *Doshas* help in maintaining the equilibrium of the human body. Also, one should plan diet and regimens according to one's age as the body's nutritional needs as well as physical needs will vary depending on the progression of time. This underlines the relevance of the rules of *Dinacharya* (daily regimens) as explained in our *Samhitas*.

Similar is the case with the 6 seasons. The *Caya* (accumulation), *Kopa* (aggravation) and *Samana* [13] (pacification) of the *Tridoshas* occur according to seasons and here also time is the main controlling factor. The *Samanya Vissha Siddhanta* is applied to maintain health by considering the *Vridhhi* (increase) and *Kshaya* (decrease) of *Doshas* according to the *Rtus*. Various rituals and food preparations are mentioned as *Rtucharyas* (seasonal regimes) with this aim. In the concept of *Vegas* (urges), timely evacuation of *Adhaaraneeya vegas* (non-suppressible urges) and if not followed will lead to various *Rogas* (diseases) in the long run. Also, the *Dharaneeya vegas* (suppressible urges) are mentioned accordingly because one should not express such *Vegas* in any time. Acharya Bhavamisra quotes the importance of following *Dinacharya* (day regimes), *Ratricharya* (night regimes) and *Rtucharya* (seasonal regimes) for attaining *Swasthya*[14] (health). Acharya Vagbhata has mentioned that remaining *Kale hitam* [15] is one among the important factors for remaining *Swastha* in one's life.

Kala - Curative Aspects

As Ayurveda is a medical science, it gives prime importance to timely management of diseases by administering medicaments in appropriate time. Treatment should be done at an appropriate time, otherwise even a wholesome drug/diet will prove to be unwholesome.

The unique concept of *Shadkriyakala* [16] or the 6 levels of etiopathogenesis by Acharya *Susruta*, provides the perfect understanding of the *Doshavastha* (condition of body humours) at various levels and how the progression of diseases can be arrested by the timely intervention at each level. Right from *Nidana* (etiology) to *Chikitsa* (treatment), *Kala* plays an important role. Time is very much crucial in treatment procedures like *panchakarma*, as standardised duration is mentioned for each procedure, if not done becomes *Heena* (less), *Ati* (excess) or *Mithyayogas* (improper combination) and may lead to complications.

Prognosis of a disease is very much affected by time factor as a disease of acute onset is much easily curable than that of chronic onset. It is also important that if a *Roga* is having *Atulya* (unequal) *Dosha*, *Dooshya*, *Rtu* [17], etc it becomes easily curable. Ayurveda also mentions the unique concept of *Rishta Lakshanas* (signs of death) in which seeing some particular symptom in a patient an efficient *Vaidya* (Physician) can ascertain the correct time of death. According to Chakrapani Datta, *Rishta Lakshanas* can be *Niyata* as well as *Aniyata*[18], meaning imminent or predetermined signs of death based on the action of time.

Oushadha sevana kala^[19] (time of administration of medicine) is also another important aspect - eleven are mentioned in Ayurvedic texts each in context to *Doshavasthas* (condition of body humours) and various diseases. So, only if given at appropriate time medicines will give the desired effects. *Kala* also directly influences the potency of raw drugs as well as formulations^[28]. Specific guidelines are mentioned in Sarngadhara Samhita for the seasonal collection of raw drugs and there is clear mentioning of the *Saveeryatavadhi*^[20] (shelf life) which denotes the shelf life of various medicinal preparations.

DISCUSSION

In this modern era, many changes that occur around us is as a result of the effect of *Kala* only as it is the only factor which cannot be controlled by man. As Ayurveda says *Janapadodwamsa vyadhis* (pandemics)^[21] occur due to vitiation of *Vayu* (air), *Udaka* (water), *Desa* (place) and *Kala* (time). Even the food we eat, the climate around us, everything is undergoing *Parinama* by the effect of *Kala*. In the context of *Balam*^[22] (immunity), the types of immunity are as *Sahaja* (innate), *Kalaja* (periodic) and *Yuktikritam* (acquired). So, the immunity acquired throughout human life due to effect of seasonal changes play a vital role in fight against diseases and it has very relevance in present day scenario as new variants of viruses are arriving day by day. While explaining the concept of *Vikaravighatabhavaabhava prativisesha*^[23], Acharya Caraka says that all the factors which cause the presence or absence of disease depends mainly on *Kalaprakarsham*. It means that the acute or chronic nature of a disease has an important role in deciding the pathogenesis. Due to the effect of *Kala* the various *Hetus* (reasons) accumulate and result in the formation of a *Vyadhi*^[24] (disease).

In *Ashtaahara Vishesayatana*^[25] (factors related to food intake), *Kala* plays a role as one of the eight dietetic factors, alongside *Prakriti*, *Karana*, *Samyoga*, *Rasi*, *Desa*, *Upayogasamstha*, and *Upayoktha*. Here also, time is taken as *Nityaga*, dietary regimens that are to be followed in daily and seasonal basis and *Avasthika*, adapting diet according to disease conditions. In *Hemanta rtu*, *Guru anna* (heavy food) is indicated as *Agnibala* (strength of digestion) is increased due to seasonal influence and *Laghu ahara* (light food) is indicated in *Jwara* (fever) to support reduced digestive capacity.

Kala is explained as one among the *Dasavidha pareekshyabhavas*^[26] (10 factors to be examined). It is considered as both *Samvatsara* (year) and *Aturavastha* (condition of patient). The division of a *Samvatsara* into *Shadrtus* is for the purpose of *Rtusodhana*

(seasonal purification), one among the *Vikara anutpattikara Bhavas*^[27] and the importance of '*Yathakala Doshavasechanam*^[28] is highlighted in the Samhitas. While examining the patient, condition according to the passage of time is to be properly studied. For example, *Kashaya* (decoction) is contraindicated in *Navajwara*^[29] (acute fever). Only after 6 days *Kashaya* can be given. So, for the proper *Siddhi* (success) of the *Bheshaja* (medicine) the *Avastha* (condition) of the patient is to be periodically examined.

Acharya Susruta has mentioned *Kalabala pravritta vyadhis*^[30] as one among his seven-fold disease classification. Those are diseases produced by the effect of passage of time and are of 2 types - *Vyapanna rtukrita* (produced by abnormal seasonal changes) & *Avyapanna rtukrita* (produced by normal seasonal changes). The concept of *Vyapanna rtukrita vyadhis* has high relevance in these times as we are suffering from various newly emerging diseases due to global warming and other abnormal seasonal changes. Susruta has explained that these *Rtuvyapat*^[31] or abnormalities of season are caused by *Adrishta* (non-righteousness or Adharma) and these will cause abnormalities in plants, medicines & water and by using these many pandemics or epidemics occur. Acharya has also instructed certain regimens- *Vyapanna rtucharya*, during the abnormal seasons which is beneficial to oneself and the society.

Ayurveda gives much importance to personalised treatments as each person varies in their *Prakriti* and this concept is based on the *Yukti* (logical reasoning) of the *Vaidya*. This *Yukti* or logical interpretation is based on the factors of *Matra* and *Kala*^[32] only. Chronotherapeutics^[33] is an emerging drug-free medical intervention that exploits the body's circadian rhythms through changes in sleep/wake cycles and daily light exposure. The aim of chronotherapy is to enhance medical treatments by considering the natural circadian rhythms of the body. The sleep-wake cycle consistently mirrors the activity of the circadian clock across different animal species. The concept of Chronotherapeutics is thus gaining so much importance in both protecting health as well as disease management. So, by following the normal characters of one's biological clock (*Kālo anukoola*) a person can remain disease free without the use of any medications.

Medical staff, whether at the hospital or elsewhere, must meticulously record the timing of various elements of patient care, with particular emphasis on medication administration. Inaccurate recording about when the medication has been administered to a patient, or failure to administer it at required intervals, can lead to potentially fatal results.

Surgery requires precision in every aspect, including timing, especially while making split second decisions which may act as the lifesaving thread in many cases. In emergency situations, such as following a cardiac arrest, the duration of resuscitation efforts must be strictly monitored, highlighting the critical role of timing in the life-saving process. Failure to adhere to these exact timings can lead to many complications and faults in patient care. So in healthcare, a proper time synchronization which will ensure accuracy, security and reliability is most necessary.

CONCLUSION

Kala being the only thing that is constantly changing and that which is uncontrollable is the main thing which controls the life and death of a person. In the healthcare sector, precise timekeeping can be critical, often making the difference between life and death. Regardless of the size or scope of your medical facility, accurate time is integral to numerous processes and systems, enhancing both patient care and operational efficiency. In this fast-paced world where time is viewed as a most precious commodity, we often tend to overlook its natural effect on our body and mind which later emerges as many physical, physiological and psychological diseases. So, in both preventive and curative aspects in this modern lifestyle we especially those in healthcare sector must always consider *Kala* as it is one among the main factor that controls the purpose of Ayurveda – “*Swasthasya Swasthya Samrakshanam and Aturasya Vikaraprasamanam*”.

REFERENCES

1. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 6, Ver 3, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.23.
2. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 11, Ver 42, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.76.
3. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 1, Ver 54, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.14.
4. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 24, Ver 7, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.114.
5. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 4, Ver 27, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.58.
6. Acharya Dalhana, Commentator, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 6, Ver 3, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.23.
7. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 6, Ver 3, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.23.
8. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, Chapter 1, Ver 21, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.236.
9. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 6, Ver 7, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.24.
10. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sarirasthana, Chapter 2, Ver 33, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.348.
11. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Indiyasthana, Chapter 1, Ver 4, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.354.
12. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 1, Ver 7, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.7.
13. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 12, Ver 24, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.196.
14. Bhavaramisra, Bhavaprakasa Vol 1, translated by Prof K.R. Srikanta Murthy, Purva Khanda Prathama Bhaga, Chapter 5, Ver 2, Varanasi: Krihnadas Aademy; 2021.p.78.
15. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 2, Ver 26, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.30.
16. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 21, Ver 36, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.106.
17. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 1, Ver 30, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.18.
18. Acharya Chakrapani, Commentator, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Indiyasthana,

- Chapter 2, Ver 4-5, Varanasi: Chaukhamba Sanskrit Sansthan; 2021.p.357.
19. Vagbhata, Astanga Hrdaya, edited by Pt. Hari Sadasiva Sastri Paradakara, Sootrasthana, Chapter 13, Ver 37, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.218.
20. Sarngadharacharya, Sarngadhara Samhita of Sarngadharacharya, English Translation by Dr.G.Prabhakar Rao, Prathama Khanda, Chapter 1, Ver 59, New Delhi: Chaukhambha Publications; 2013. p.8.
21. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, Chapter 3, Ver 6, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.241.
22. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 11, Ver 36, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.74.
23. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Nidanasthana, Chapter 4, Ver 4, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.212
24. Acharya Chakrapani, Commentator, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Nidanasthana, Chapter 1, Ver 7, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.194.
25. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, Chapter 1, Ver 21, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.235.
26. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Vimanasthana, Chapter 8, Ver 84, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.274.
27. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 7, Ver 46-50, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.53.
28. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 21, Ver 32, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.118.
29. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Chikitsasthana, Chapter 3, Ver 132, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.412.
30. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 24, Ver 7, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.114.
31. Susruta, Susruta Samhita of Susruta, edited by Vaidya Jadavi Trikamji Acharya, Sootrasthana, Chapter 6, Ver 16, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.27.
32. Agnivesha, Charaka samhita of Acharya Charaka, Dridhabala krit, edited by Vaidya Jadavaji Trikamji Acharya, Sootrasthana, Chapter 2, Ver 13, Varanasi: Chaukhamba Sanskrit Sansthan; 2021. p.25.
33. Coulson RL, LaSalle JM. Epigenetics of circadian rhythms in imprinted neurodevelopmental disorders. In: Progress in Molecular Biology and Translational Science. Elsevier; 2018. p. 67–92.

Cite this article as:

Parvathy Prakas Seethalekshmy, Leena Parameswaran Nair, Meera Esanamangalam, Haritha Chandran. Kala (Time): The Crucial Element in Understanding Health and Disease in Ayurveda. AYUSHDHARA, 2025;12(1):282-286.

<https://doi.org/10.47070/ayushdhara.v12i1.1856>

Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**

Dr. Parvathy Prakas Seethalekshmy

PG Scholar,
Department of Maulika Siddhanta
(Basic Principles of Ayurveda),
Amrita School of Ayurveda,
Amrita Vishwavidyapeetham,
Amritapuri, Kerala, India.
Email: drparvathyprakas@gmail.com

Disclaimer: AYUSHDHARA is solely owned by Mahadev Publications - A non-profit publications, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. AYUSHDHARA cannot accept any responsibility or liability for the articles content which are published. The views expressed in articles by our contributing authors are not necessarily those of AYUSHDHARA editor or editorial board members.