



ROLE OF KALA IN PANCHAKARMA THERAPY – A REVIEW ARTICLE

Prajakta korde^{1*}, mamata nakade², pranesh gaikwad³, vaishali choudhari⁴

1*- PG Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved & Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune – Maharashtra, India-411018

2- Guide, HOD and Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved & Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune – Maharashtra, India-411018

3- Associate Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved & Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune – Maharashtra, India-411018

4- Associate Professor, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved & Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune – Maharashtra, India-411018

Corresponding Author

Prajakta korde

PG Scholar, Department of Panchakarma, Dr. D. Y. Patil College of Ayurved & Research Centre, Dr. D. Y. Patil Vidyapeeth, (Deemed to be University), Pimpri, Pune – Maharashtra, India-411018.

ABSTRACT-

The ideas and practises related to human health as taught by Ayurveda provide the approaches for developing a healthy personality depending on the season. Regarding health and disease, the Kalais is acknowledged as one of the significant environmental phenomena. According to Kala, the Ayurvedic lifestyle recommendations play a crucial part in preserving and developing good health as well as in the prevention and treatment of disorders. Kala affects a variety of factors, including Dosha, Agni, Bala, Ahara, Vyadhi, Oushadha, and Chikitsa, among others. Ageing also depends on the Kaala, which allows us to determine the Sharira Avastha, Sharirabala, and Rogabala, among other things, of the person so that the therapy can be arranged to minimise the patient's suffering. Thus, an effort is made to clarify the therapeutic use of Kaala or the time in relation to Traditional ayurvedic therapies that perform Kaya Shodhana, which can be thought of as the body's detoxification or cleaning.

Therapy does not work well and can lead to several issues if it is not administered at the right time. So, an effort is made here to assess the function of Kaala (time) in Panchakarma, which involves the removal of toxins from the body in order to purify it and thereby treat disease.

INTRODUCTION

Ayurveda is a life science that promotes longevity and wellness. Its purpose is to safeguard bodily health and treat disease-related afflictions. Ayurveda's Nidana Parivarjana (Preventing the Cause) and Samprapti Vighatana treatment philosophies (breaking of pathogenesis). There are two ways to perform Samprapti Vighatana: Shodhana (bio-purification by Panchakarma), and Shamana (bio-balancing care by medicine, dietary regime, life style modification). Ayurveda's Panchakarma is a special form of treatment that focuses on systemic purification in order to reach a balanced state of consciousness, body, and mind. In nature, everything occurs in cycles. Everything has a rhythm, whether it be a second, an age, a day, a season, happiness or suffering. All the activities of the world are under the control of Kaala.

ETYMOLOGY AND DERIVATION

The letters 'Kakar' and 'Aakar' of Kala and 'Lakar' of Lee dhatu combine to form the word 'Kala. Kala means to hold or put on as well as to count (kalate) (kalayaati). The subtle aspect of Kala never ends (continuity never breaks). Su.Sa. Sutra Sthana, page 6 All beings (bhuta) will return to their pure absolute form as a result of the destruction attribute. Su.Sa. Sutra Sthana, page 6

These etymological derivations express different Kala characteristics. Kala's continuity is unbroken at all times. Kala is implied to be both timeless and limitless. All beings in the universe are subject to kala, which controls how they are destroyed. The bhuta return to their pure perfect form following the catastrophe.

SYNONYMS

- Parinama [Cha.Sa.Vimana Sthana 8/48] [Cha.Sa.Sutra Sthana 11/42] (result)
- Samwatsara [Cha.Sa.Vimana Sthana 8/125] (year)
- Bhagawan [Su.Sa. Sutra Sthana 6/3]^[31](the Almighty)
- Swayambhu [Su.Sa. Sutra Sthana 6/3]^[31] (self-originator)

DEFINITION OF KAALA

According to Acharya Charaka, Kaala is a phenomenon that transforms into seasons, solstices, and other phenomena. Kaala is the manufacturer of all the products now in production. The universe depends on it for protection. Although there is just one, it has been split up into numerous degrees, such as seconds, minutes, hours, days, and months, for practical purposes. Dalhana, the Sushruta Samhita commentary offers numerous detailed definitions of the Kaala.

- Kaala is the element that unites and divides all entities into a single fraction.

Kaala is the material that causes everyone to experience both happiness and misery, as well as the substance that causes everyone to die. Kaala is also the term for the factors that led to the birth of all beings.

In terms of the collection of remedies, preservation, purification, production, toxicity, validity and expiration of medications, disease, treatment plans, birth, growth, development of various organs in the embryo, various stages of human life, death, etc., Kaala plays a significant role in Ayurveda, making her the supreme force in creation and evolution. Kaala is a crucial consideration while choosing the best course of treatment. Planning for all therapies in a healthy individual completely depends on the Kaala. Grishma, Varsha, and Shishira are examples of Kaala that are unsuitable for any Panchakarma. If these procedures are to be performed in an emergency, the appropriate environment must be artificially maintained.

Attributes (guna) of kala

Number (sankhya): It is only one because all locations exhibit the same cognition, "It is slow or late," which is one of the kala marks.

Measure (parimana): Since it lacks a fixed size, it is infinitely large (mahat).

Samyoga (combination) and vibhaga (disjunction): As time goes on, old molecules disjoin their atoms and break, and new molecules combine to create. During the passage of time, the world experiences actions and material movements. These behaviours or movements are related to disjunction and combination.

Classification - Kala is divided into two groups according on the environment:

Eternal

Temporary or short-term

1. Eternal (nityaga kala): This refers to time that is constantly moving and is concerned with the day, season, and year. Ch. Sa. Vimana Sthana 8/125 It is utilised as a calendar by regular people in addition to the medical community. There are two Ayanas in the year (samwatsar or varsha) (solstitial movement of sun to north or south)

Northward movement of the sun (uttarayana or adana kala): Duration happens when the sun ascends or moves to the north.

b. Sun's southerly movement (dakshinayana or visarga kala): Time period during which the sun sets or moves south.

There are three seasons in each of these ayanas (ritu). Every ritu lasts for two months (masa). Shuklapaksha and Krishnapaksha, each lasting 15 days, are the two fortnights (pakshas) that make up each masa. This split is thought to be in terms of the moon.

2. Transient or temporary (avasthikor aturakala):

Due to the many stages of disease presentation, a patient's state fluctuates throughout time. [Cha Sa Vimana Sthana 8/128]. Planning the management of a disease requires an understanding of its stages. Kala is essential in the study of medicine.

Time was measured in a variety of ways in antiquity. For practical purposes, it is divided into units such akshinimesh, truti, seconds, minutes, hours, days, and years, among others. Akshinimesh is the smallest unit of time (also called matra). The length of time between eyelid blinks is known as akshinimesha.

The following three divisions can be used to study panchakarma's goal:

1. Panchakarma for healthy individuals (Preventive purpose)

2. In the case of Rasayanadi Asadharana Guna prapti (Promotive purpose)

3. Panchakarma in accordance with illness (Curative purpose) Panchakarma in a healthy individual.

Need of Panchakarma in healthy person can be categorized as the following:

1 Dincharya (day time regimen)

2Ritucharya (seasonal regimen)

3. In order to assess Vegavarodhajanya lakshana (symptoms arising due to retention of natural urges)

Dincharya Panchakarma (daytime routine) -

The daily routine, or dinacharya, consists of all the things we must accomplish from the moment we get up in the morning until we go to bed at night. Gandusha (gargling of mouth and throat), Kavala (mouth wash), Dhumapana (medicated smoking), Nasya (medicated nasal drops), Abhyanga (herbal oil massage), Pada Abhyanga (foot massage with medicated oils), Shiro Abhyanga (head massage with medicated oils), Udvartana (massage of the body with herbal powders), Samvahana (mild massage) are said to be performed every day in sequence for betterment of health.

Panchakarma in Ritucharya (seasonal regimen)-

The primary goal of Panchakarma is the removal of morbid substances from the body. Because the accumulation, aggravation, and pacification of various doshas occur naturally in a seasonal rhythm, specific Panchakarma must be performed during the appropriate months in order to remove an aggravated dosha in its prakopa kaala. Shishira, Vasanta, and Grishma, also known as Adana kaala, and Visarga kaala, are the two basic divisions of the six seasons (varsha, sharad and hemanta).

Panchakarma before Rasayana (rejuvenation therapy)-

Shodhana of the body is a crucial prerequisite for the administration of Rasayana, according to Acharya Sushruta, who has stressed the need of Panchakarma before the rejuvenation therapy (rejuvenation therapy). Prior to Kutipravesika Rasayana, Vamana, Virechana, Basti, and Nasya Karma should be performed.

To attain Samyak Shodhana and for Prakriti sthapana, there are primarily three stages of Karma (treatment) in panchakarma, according to the ailment (getting back to normalcy).

PURVA KARMA

These two medication classes, Deepana and Pachana, work to digest Ama while boosting Agni. Deepana-Pachana is administered until nirama lakshana is attained; there is no set time limit.

Without deepana-pachana, snehana might result in the destruction of Sanjna and perhaps death.

Snehana (oleation) - Prior to Swedana, Snehana should be continuously administered for a minimum of three days or a maximum of seven days. Koshtha's description of Snehapana's duration 3 days for Mridu Koshta Madhyama 5 days in Koshta Days Krura Koshta Snehapana Kaala in light of dosha involvement. Daytime in Sleshmadhika and Sheeta kaala In VataPittadhika and Ushna Kaala, Sneha Karma should be performed at dawn when the sun is just rising. Snehapna should not be performed in Akala and Durdina (very hot or cold weather) (on the day of cloudy atmosphere). According to Ritu, Snehapana Kaala (season) Saripi Sarad (september-november) -Pravrit Taila (forepart of rainy season) Madhava Vasa Majja (january-february)

Swedana (fomentation) (fomentation) Just Swedana should be performed after Snehana Karma to calm Vata.

PRADHAN KARMA-

Vamana's Kaala (emetic therapy) Chaitra and Vaishakha are the Prakopa Kaala of Kapha (March, April and May). Naturally, a healthy individual prefers Vamana throughout these months. Charaka asserts that Chaitra is more suited for Vamana even though it can be administered at any time depending on the patient's health. For a therapy, the Kaala in between days is equally crucial. Vamana, which is Shleshma kaala, must be conducted in the early morning. Vamana must be performed the day following Sneha pana. One should wait one Muhurta kla for Vega after Vamana oushada prayoga.

Kaala for Virechana (purgative therapy) Pitta is at its worst in the autumn (Kartika and Agrahayana; October to December). Virechana should be conducted now, even in healthy, normal people, to guard against upcoming Pitta-caused disorders. Virechana can be practised in other seasons as well, but the atmosphere in the virechana griha should be intentionally kept in the autumnal state. The patient should get Swedana Karma and Snehana during the time between two therapies, such as Vamana, and Snehana should be administered once more at the conclusion of each therapy. Snehana and Swedana should be performed correctly before to the second therapy if Virechana is to be administered after Vamana and if Basti is to be administered after Virechana. One shouldn't think that Snehana and Swedana at the start of Vamana Karma are enough to cover the other treatments. Each elimination therapy should be followed by the administration of medicated ghee, etc. to address any remaining doshas and to combat any fatigue brought on by the prior administration of the elimination therapy.

Schedule for diet before Vamana and Virechana Karma- The person who is due to take Vamana the following day should have a meal that aggravates Kapha, is simple to digest, and consists primarily of liquids (in the night of the previous day). A light, hot diet should be consumed by the person who is scheduled to take Virechana the following day. Only after the

preceding meal has been digested can the Virechana be administered. When Shodhana is given before the preceding meal has been digested, issues like Glani (depression) and Vibandha (constipation) result, and the therapy has the reverse effect (i.e. the Vamana causes Virechana and vice versa).

Schedule for diet after Vamana and Virechana Karma-

The Agni (strength of digestion and metabolism) of a person decreases after the body has been purified and dosas removed from it by Vamana and Virechana. Step-by-step dieting from light to heavy is advised to prevent this. Peya (thin gruel), vilepi (thick gruel), akrita as well as krita-yusha (unseasoned and seasoned vegetable juice), and akrita as well as krita-rasa should be provided to the patient as nourishment (unseasoned and seasoned meat-soup). If pradhana (maximum cleaning) is performed during the purification, a 7-day regimen is followed. The following schedule is indicated if the cleanse is of the madhyama (moderate) or avara shuddhi (minimal) intensity.

This limited diet is recommended to be followed starting the same evening or the next morning of the therapy administration day. The remarks made on this by Cakrapani are crucial. He asserts that if the patient has been properly cleansed, a restricted diet should be administered that evening. He shouldn't be given any food in the evening if he hasn't been adequately cleansed; instead, the restricted meals should begin the next morning. The patient should be administered a ghee potion on the ninth day (of Vamana), following samsarjana-krama (consumption of a controlled diet) (if purgation therapy is intended to be given subsequently).

Kaala for Basti (medicated enema)- In a healthy state, basti is typically recommended in pravrit as part of ritucharya. Basti can be used at any time and in any season to treat sickness. In general, niruha shouldn't be used during particularly hot or cold weather. For anuvasana, there aren't many seasonal limitations. According to the correct interpretation, the anuvasana should be performed at the beginning of the evening in the rest seasons or during the hemanta, vasanta, and shishira. In cases of highly acute vata, anuvasana may be administered at any time of day or night. Anuvasana may be administered at any time after eating in cases with acute Vataja disease. Every day and at any time, matra basti can be given.

If Niruha is provided after Vamana or Virechana, a 15-day break must be kept and at least one day must pass between Virechana and Niruha. Anuvasana should begin on the ninth day and be practised until the day of niruha, either every day, every other day, or as needed, if niruha is intended after vamana.

Time for administration of Niruha Basti (decoction enema) - Niruha should be administered on an empty stomach and after the digestion of previous meals, although care should be made to prevent atiyoga and urdhvagamana vyapada in the patient by preventing overeating. It should thus only be given in the afternoon. After samsarjana-krama on the ninth day of Virechana,

one should perform anuvasana (if niruha type of medicated enema is intended to be given subsequently). The person's body should then be rubbed with medicinal oil for three days, and after that, when they are not very hungry, they should have a niruha or evacuative form of medicinal enema. The patient should then, provided that they did not consume a large meal the previous evening.

Time for administration of Anuvasana Basti (oil enema) - Anuvasana, or an unctuous type of medicated enema, should be delivered during the day during the winter and spring seasons and throughout the night during the fall, summer, and rainy seasons.

The patient shouldn't eat anything at night once the anuvasana's Basti material has exited the anal tract. The following day, food should be given to him both during the day and at night. Anuvasana should be administered the following day, either on the second, third, or fifth. After that, a medicated enema of the niruha variety should be administered every third or fifth day, followed by anuvasana. The patient should receive anuvasana again on the second day if Vayu is extremely irritated, on the third day if Vayu is moderately aggravated, and on the fifth day if pitta and kapha are aggravated after the unctuous Basti material used for anuvasana comes out of the rectum.

Time for administration of Uttara Basti- Local Swedana and Snehana should be performed prior to giving Uttara Basti. Before administering Uttara Basti, 2-3 Niruha Basti must be given. It needs to be given during Ritukala in the morning (ovulation period). Days between Virechana and Niruha basti are spaced out. After virechan, one should refrain from taking niruha basti for seven days, and after taking niruha basti, one should refrain from taking virechan for seven days, as doing so may harm the body, which has already been deprived of nourishment by the previous therapy. There is no need for samsarjana-krama after niruha-basti. The patient might be administered Virechana three days after receiving snehana. Niruha and virechana should be separated by seven days in order to prevent this possibility.

The body of the person gets rid of morbid material if the luscious substance given for anuvasanabasti is held for three yamas (nine hours). Another anuvasana-basti or unctuous type of medicated enema should be given if it passes fast (before nine hours). If the unctuous material is not held (properly) in the rectum, the rectum is not retained (properly), and the body of the individual does not generate an acceptable unctuous effect. The time between two courses of basti treatments (including vamana, virechana, and nasya) should be double that of the initial administration.

Schedule for Anu taila Nasya - In conditions like Vata dosha in shirah, hidhma (hiccups), apatanaka (convulsion), svarabhramsha (loss of voice), etc., snehana nasva is to be administered twice day (in morning and evening). Some ailments require it to be administered every other day at a specified time while taking the doshakala into consideration. Although there are other publications that suggest continuing it for five, seven, or a maximum of nine days since after nine days, sneha becomes a part of the body, it should be continued for at

least seven days. Depending on the condition, snehana nasya may be administered regularly at a 1- to 2-day intervals and should be continued for 7 to 21 days or until the ailment is fully cured.

Time for Pratimarsha Nasya- Pratimarsha nasya can be administered at any time (day, season), even when it's inappropriate or wet outside. It can be administered to anyone at any age. Vagbhata referred to 15 kaala. The Parihara Kaala Restrictions and a rigorous diet are practised during parihara kaala, which lasts twice as long as panchakarma.

Raktamokshana (bloodletting) Kaala

Raktamokshana is typically performed in Sharad ritu. On days without a cold breeze, excessive heat, or cloudy skies, raktamokshana should be performed. It should be performed during midday during Hemanta ritu, in the morning or evening during the summer, and during the rainy season when there are no clouds.

DISCUSSION

Ayurveda is a holistic medical system that takes into account the patient's Prakriti, Agni, strength, and other factors, as well as the Vyadhi, to provide patients with customised treatment. In terms of Panchakarma and Kayashodhana, Kaala or time plays a significant role in determining the type of Panchakarma protocol to be performed, the severity of the Vyadhi, as well as its benefits and drawbacks.

Deepana-pachana- Most of the Deepana Dravyas (appetiser) have predominance of Laghu (Lightness) and Ushna Gunas (Hot) whereas Ruksha (rough) and Ushna gunas (hot) are prevalent in Pachana (digester). Rasapanchaka of the medicament is the cornerstone of Ayurveda Pharmacology. There, the dominant Mahabhootas play a significant role. The Deepaniya medications include Ushna virya and Tikshana, Ushna and Laghu guna, as well as Vayu and Agni mahabhoota, Katu, Amla, and Lavana rasa. As opposed to Pachaneeya medicines, which are composed of Tikta, Katu, and Kashaya rasa with Agni and Vayu mahabhoota. Charaka has explained properties of six Rasas (tastes) to grasp its specific mechanism of action; and gave directions for appropriate usage of the same in the therapies. While Pachaniya medications are used to treat indigestion, Deepaniya drugs are used to stimulate and increase the digestive fire. Critical analysis and review reveal that Tikta rasa is primarily found with the medications mentioned for Pachaniya impact whereas Katu, Amla, and Tikta rasa are connected to the Deepaniya activity of the herbs. The aforementioned acts are caused by the presence of Agni and Vayu mahabhoota. The Dravya of Sheeta or Ushna Veerya are employed in treatments based on the causative Dosha involved in Agnimandya. The favoured medications for ajirna include Pippali, Chitrak, and Nagar, all of which have pachana or amapachana activity.

Snehana and Swedana- The characteristics resulting from Snehana point to the loosening of morbid Doshas that were stuck to the walls of changing channels, which will aid in the

subsequent Shodhana Karma. By the combined effects of oral lipid ingestion (Snehapana) and fomentation (Svedana), there is an apparent increase in the Dosha (humours), which is followed by liquefaction of the Dosha, metabolism of the Dosha, opening of tissue channels (Srotomukha), and control of neurohormonal mechanisms (Vatanigraha). The Doshas are then propelled to the Koshtha (GIT) by Anuprav (Shodhana Karma). The body may experience the following results from Snehana Karma (1) Coats the Srotamsi in grease (microcirculatory channels) 2) Displaces exudates, which can ease stress and pain. Softens tendons, ligaments, and muscles. Hence, it reduces body rigidity and stiffness and increases elasticity. 4) Creates clear conduits (micro passageways) for the Swedana therapy's removal of vitiated Doshas. Swedana Karma (Sudation fomentation heat) can have the following physiological effects on the body: it makes people sweat and gets rid of pollutants. 2. Brings about Srotoshudhi (cleanses micro channels) 3. Liquifies the evil Doshas and sweats them out. 4. Heals muscle and joint vascular insufficiency. 5. Leads to the relaxing of tendons and muscles. 6. Initiates local metabolic processes, which in turn relieves symptoms including pain, stiffness, soreness, and swelling.

Vamana and Virechana- Anti-peristaltic movement have started to occur in Vamana. The antiperistaltic wave moves backward upward into the intestine at a velocity of 2- 3 cm/sec, starting as far down in the intestinal tract as the ileum. Strong intrinsic contractions of the lower oesophageal sphincter and duodenum take place during vomiting. So, after the vomitus starts migrating into the oesophagus, a particular vomiting technique employing the abdominal muscle expels the vomitus to the outside. After Snehana and Swedana are eliminated, toxic/waste substances that are responsible for reducing the degenerative process of many diseases through Vamana are ejected in the vomitus. The Virechana Karma eliminates the morbid Doshas from Rakta, removes the Margavarodha (obstruction), and controls Vata's activity and mobility. The inflammation of the gut wall during the Virechana process, according to the current perspective, causes hyperemia and exudation, which increases the passage of protein-rich fluids through vessel walls to the intestinal lumen. Increased fluid volume also causes toxic material to be diluted. The direct cause of the fluid volume reduction is Virechana's evacuation of the fluid from Rasa-Rakta. Virechana regulates Vata and removes all morbid Doshas from all micro to macro-Dhatu channels, which lessens all Vata, Pitta, and Kapha symptoms on a Srotasa level.

BASTI- It can be understood in three different ways:(1)by the mechanism of absorption (2) by the idea of system biology; and (3) by the mechanism of neural stimulation.

By absorption mechanism After entering the rectum and colon, basti triggers the gall bladder to secrete bile, which results in the creation of conjugate micelles that are then absorbed through passive diffusion. Middle-chain fatty acids in particular can be absorbed from the large intestine and colon portions of the gastrointestinal tract (GIT) and disrupt the pathophysiology of illness.

By system biology concept How Basti may affect the organ systems is now more understood thanks to the most recent system biology theory. According to this hypothesis, every organ has a molecular connection. Each molecular event is changed at the cellular level, followed by the level of the tissue, and finally the level of the organ. Hence, the effects of Basti on the gastrointestinal system will undoubtedly have an impact on other systems and aid in achieving internal balance in the body. These Ayurvedic purificatory techniques aid in the body's purification, focusing on the promotion of good health and overcoming illness. Administration of these Panchakarma therapies is suggested by Acharyas in both healthy and pathological conditions. When administered after Panchakarma treatments at the prescribed Kaala or at the period specified in the Shastras, Aushada Dravyas has been found to be more effective. Instead, if the method is carried out without taking Kaala into consideration, a number of difficulties must be faced.

CONCLUSION-

Ayurveda's unique idea of panchakarma, which places a greater emphasis on kayashodhana—the body's detoxification—aids in maintaining good health, maximises the advantages of rasayana, and performs rogaprashamana. Treatment effectiveness is attributed to the administration of Panchakarmatherapies at the appropriate time or the Kalaknowing their significance and efficacy.

REFERENCES –

1. Sharma R.K. and Dash Bhagwan, Caraka Samhita, Varanasi, Chowkhamba Sanskrit Series Office, Reprint Edition, Vol I, Sutrasthana, 2011; 30/26:600.
2. Murthy K.R.S., Vagbhata's Ashtanga Samgraha, Varanasi, Chowkhamba orientalia, 2nd revised edition, Vol I, Sutrasthana, 2016; 16/20: 379.
3. Mishra Y.C., Padartha Vijnana, Chaukhambha Sanskrit Sansthan, Varanasi, reprint edition, 2012; 120-122.
4. Sushruta, Sushruta Samhita, Nibandhasangraha commentary of Sri Dalhana Acharya and Nyaya Chandrika panjika of Sri Gayadasacharya on Nidana sthana, chikitsa Sthana, 2014; 34: 520.
5. Murthy K.R.S., Vagbhata's Ashtanga Hridayam, Varanasi, Chowkhamba Krishnadas Academy, 8th Edition, Vol I, Sutrasthana, 2011; 2/8-15: 24-25.