

Comprehensive Analysis of Kaala as a Karan Dravya in Nidana Panchak: It's Impact on Ayurvedic Diagnostic Mechanisms and Pathogenesis

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ABSTRACT

Nidan Panchak provides accurate information on diseases and their cures from start to finish. It aids in diagnosis, differential diagnosis, and prevention through a nutritious diet and lifestyle. Furthermore, Nidan Panchak helps with early diagnosis, understands the stages of illness, and distinguishes between diseases based on signs and symptoms. By considering medicine, diet, lifestyle, and examination methods, Upashaya is utilized to rule out diseases and ensure effective disease therapy. Protecting people from disease and death so they can live long, healthy lives is the aim of Ayurveda. It is necessary to comprehend the mechanism and the contributing elements in order to administer rational treatment or preventive treatments. Comprehensive information on the etiopathogenic factors, genesis, and etiology of diseases is provided by the Nidana Panchak. Through methodical therapy planning based on the disease's progression, pathogenesis can be eliminated. Ayurvedic teachings place a strong emphasis on understanding disease in terms of Nidana (etiology), Dosha (dysfunction), and Dushya (target tissue) stages. No matter the therapeutic approach, diagnosis is essential in every system. Ayurveda's holistic approach emphasizes considering a number of factors while reaching a diagnosis..

Keywords: Nidana Panchak, Ayurvedic Diagnosis, Etiology, differential diagnosis, etiopathogenic factors.

1. INTRODUCTION

One of the nine Karana Dravyas in Ayurveda, Kaala, describes time and its importance in reaching the objectives of Aturasya Vikara Prashmanam Cha, Swasthasya Rakshana, and determining the chronicity of illnesses(1). It is essential to daily and seasonal routines, the planning of disease treatment, and the collection, formulation, administration, and preservation of drugs. Through the Trisutras of Hetu (cause), Linga (signs and symptoms), and Aushadha (therapy), the ancient medical science of Ayurveda places a strong emphasis on health and illnesses. Other ideas found in the Aushadha Sutra include Chikitsa (therapy), which Charaka says will prevent illnesses independent of particular characteristics. Desha (region), Kaala (time), Pramana (dose), Satmya (wholesomeness), Asatmya (unwholesomeness), Pathya (helpful), and Apathya (damaging) must all be used in the right proportion to treat illnesses, according to the Chikitsa(3). Interactions between food and Aushadha can change a drug's effectiveness. The transformation of medication is influenced by Agni's energetic condition. When administering medication, evaluating Agni is essential (4). For instance, by promoting Jatharagni, Bhutagni, and Dhatvagni, Pratham Niranna Kala helps Rasayana. For Agnimandya, medication administration at Madhyabhakta Kaal is advised. The purpose of the study is to examine terminology pertaining to when ayurvedic herbo mineral formulations should be administered.

The systematic science of knowledge known as Ayurveda is founded on logical and reasonable thought processes. It defines health and the elements that contribute to its preservation and advancement, and it is the foundation of both traditional philosophy and alternative medicine (5).

'Swasthasya Swasthya Rakshanam and Aturasya Vikara Prashamana Ch'

These are the primary goals of Ayurveda's use of Siddhanta to promote health and prevent illness. Darshan are used to postulate the Siddhanta, which are described in Sutra form. Karya Karana Siddhanta, the "cause and effect" relationship in the universe is given clinical significance in Ayurveda (6). In addition to curing illnesses, Ayurveda also aids in disease prevention. The Sarva Tantra Siddhanta, or universal truth found in all traditions, is the first Ayurvedic principle to be recognized. Through simple routines, Ayurveda preserves health and pinpoints the underlying causes of illness (7). Regular Dadhi consumption may be a risk factor for Mukha paka, according to the study, and it is important to take into account the Prakriti of the Dadhi and person.

The basic building block of matter, Kaala, is self-originating and constantly moving. It controls human life and death and is the cause of Dravya Rasotpatti. Kaala has no beginning, middle, or end; it is self-emergent.

2. NIDANA:

In Ayurveda, the name "Nidana" can refer to several concepts, including Trividha Nidana, Sannikrishta Nidana, and Viprakrutha Nidana. The variables that set off the illness process are known as contributing or precipitating causes, whereas the primary factors are the immediate cause of a disease. The degree of Apathya Sevana, which can be either immediate or precipitate, determines the degree of Dosha Aggravation (8).

Nidana provides a hint regarding the severity of Dosha Aggravation and the disease's chronicity. The prognosis will benefit from a thorough history of the illness, including its forms, duration of intake, and severity (9). The prognosis will be Kricchrsadhya and the sickness will be difficult to eradicate if the characteristics of the causative elements are similar to those of Dosha, Dhātu, and Mala.

To sum up, Ayurveda is a highly systematized medical approach that places a strong emphasis on restoring the physiology of the body's systems and the regularity of affected Dosha, Dhātu, and Mala. For validation and pertinent application in modern science, Ayurveda's rightful acknowledgment and appreciation must be investigated scientifically.

Vitiating doshas is one of the unwholesome consequences that drugs and foods can have on the body. Serious illnesses or even death can result from timely unhealthy meals, like as dry and cold foods in the winter and hot and odorous foods in the summer. Food that is consumed too soon, such as Aprapta Kaalashana, Ateeta Kaalashana, and Adhyashana, can make you feel heavy, make it difficult to move, and cause your stomach to distend. Ajeerna, Annavaha Srotodushti, Agni dushti, and Vishamashana Rajyakshma are among the Vyadhis that might result from eating too soon.

Nidana is the term used to describe the causes of diseases, which are determined by combining diagnosis and etiological elements. These environmental elements include Vidahi, guru, vishtambhi Bhojana, raja, and dhuma (10). Making an accurate diagnosis, determining the chronicity of a problem, and determining its etiology all depend on an understanding of Nidana. It assists doctors in determining prognoses, linking symptoms to causes, and developing targeted treatment plans. Avoiding the causes that cause the disease is the greatest way to treat it and the first step in stopping further pathogenesis (11). Knowing Nidana also makes it easier to create a balanced diet and way of living, which helps prevent illnesses while preserving excellent health. All things considered, Nidana is a useful tool for diagnosing and treating a variety of illnesses.

3. HETU:

Kaala (the time) is the cause of living things and their illnesses. Kaala is the condition of the entire cosmos and the cause of all that occurs. One of the main causes of the development of illnesses affecting the body and mind is the improper, excessive, or nonexistent use of time (12).

Overuse: Extreme manifestation of a specific (Atiyoga) season

Non-utilization: A season's manifestation in a lower amount

Inappropriate use: Characters (Mithya Yoga) that are not appropriate for a given season

4. NIDRA (SLEEP):

Nighttime vigilance results in roughness, whereas daytime sleep results in unctuousness. Oversleeping can cause headaches, fever, and delusions. Symptoms of day sleep include loss of digestive fire, indigestion, and anorexia (13). Numerous illnesses, such as Santarpana Rogas, Rakta dushti, Vataja Jwara, Mamsa dushti, Arsha, Kaphaja Atisara, Visarpa, Kaphaja Madatyaya, Vrana dushti, Vatavyadhi, Stanya Roga, and Panchkarma problems, are caused by inadequate sleep during the day.

The Nidana places great emphasis on the role that misdeeds from the past and the passage of time play in causing grief. Prajnaparadha is exemplified by disregarding treatment time, acting inappropriately, and acting without consideration for propriety (14). Uncomfortable seating, suppressing desires, injuries, frequent staring, excessive travel, sexual activity, and the west wind can all contribute to an early birth or abortion.

5. AAHAR:

In order to diagnose an illness and comprehend its progression, clinical history and interviews are essential. The highly systematized medicinal method of Ayurveda places more emphasis on restoring the physiology of the body's systems and the regularity of the affected Dosha, Dhātu, and Mala than it does on merely treating symptoms (15). The most optimal assessment instrument is Pancha Nidana, a diagnostic tool that consists of five tools.

6. PURVARUPA:

Premonitory symptoms, such as Purva Rupa, signal the start of an illness before more diagnostically precise symptoms appear. They fall into two categories: Samanya, which predicts future illness without specifying Dosha predominance, and Vishishta, which predicts Dosha predominance and more pronounced symptoms (16). These prodromes may be a sign of death or a poor prognosis. Vishishta Purvarupa identifies the prevalence of Dosha in the upcoming sickness, while the Charaka Samhita stresses the significance of examining Purvarupa from a prognostic standpoint. The progression of the disease can be stopped with early intervention (17).

Purvarupa, which are symptoms that occur before the sickness manifests and are not clearly defined, are signs of an impending illness. There are two types:

Vishishta: This is noticed by a particular dosha.

Samanya: Purvarupa, which reveals the ailment without mentioning the Dosha's involvement.

Purvarupa is essential for diagnosing diseases since it helps determine the stage of the illness and distinguish between the two. Because it helps diagnose the disease earlier and avoid additional manifestations, it also helps with treatment planning. The amount of prodromal symptoms determines the prognosis; fewer symptoms indicate an easy cure, moderate severity represents a difficult cure, and all prodromal features indicate an incurable condition (18).

7. RUPA (SPECIFIC SYMPTOMS AND SIGNS)

Lingam describes a disease's fully developed symptoms, highlighting certain traits like Dosha dominance and illness stages. These symptoms may be Pratyatma, which is a representation of constant symptoms, or Samanya, which is associated with Dosh in nature as a result of the vitiation of particular Doshas. Understanding common symptoms aids in accurate diagnosis among all potential disease forms. The technique of distinguishing between the likelihood of one disease and another with comparable symptoms is known as differential diagnosis. In order to determine the major Dosha involved in the origin of the disease, Ayurvedic core principles stress careful monitoring of indications and symptoms. Based on the evaluation of many subjective assessments of Dosha predominance, the rational approach of therapeutic measures might be recommended in the form of Samshodhana or Sanshamna(19). Making accurate and differential diagnosis requires thorough understanding of the symptoms and indicators of the corresponding diseases as well as careful monitoring of them.

A disease's rupa signifies the real beginning of the manifestation phase. The symptoms of the disease become more noticeable and distinct as rupa manifests. Different disease symptoms are caused by the pathophysiology (20). These symptoms and doshas are inseparably related with each other throughout the disease. Therefore, the symptoms of that disease are an external manifestation of the pathogenesis (Dosha dushya sammurchhana) that takes place inside the body. By exhibiting particular disease signs, it identifies the particular illness. For instance, the primary symptoms of Rajyakshma (TB) include burning in the shoulder, sides of the chest, hands, and feet, whereas Prameha (diabetes) is characterized by copious, dirty urination.

8. CLINICAL IMPORTANCE OF RUPA:

Rupa is essential for identifying illnesses based on their clinical characteristics, including the cardinal signs and symptoms, which include edema, gurgling sound, emaciation, distention of the abdomen, waning Agni power, smoothness of the chin, and edema (21). In order to make a differential diagnosis, similar symptoms and patient history must be observed. Planning specific treatments, such as Mansa gatavata and Mansa aavrita vata, which include non-unctuous enema and pacificatory techniques, requires an understanding of Rupa(22). If all symptoms manifest, the prognosis is challenging, and symptoms aid in identifying the underlying cause, such as the role of the vata dosha in leprosy.

9. UPSHAYA (RELIEVING AND AGGRAVATING FACTORS):

Anupshaya refers to the aggravating factors, whereas Upashaya refers to the alleviation of symptoms through nutrition, daily routine, and medication. Cold water is one example of a relieving factor that momentarily reduces symptoms but can subsequently make them worse. Acharya Chakrapani distinguishes eighteen different kinds of Upashaya. When there are several possible outcomes, Upashaya is a methodical diagnostic technique used to determine whether a disease entity is present. In order to plan precise corrective actions, it uses algorithms to distinguish between illnesses that are likely to share similar causes and symptoms. Upashaya and Anupshaya are used to help in differential diagnosis by examining hidden symptoms of a disease. In order to fight an illness, they are also utilized to plan and carry out healthy eating and lifestyle

habits (23). Anupshaya refers to a disease's non-relieving elements, whilst Upashaya refers to its opposite characteristics. The Upashaya idea aids in differential diagnosis by identifying the best course of action and therapy for a certain ailment. Upashaya and Anupshaya administration, however, may have distinct potential effects, such as reducing or exacerbating symptoms or leading to a recurrence of the illness (23).

10. CLINICAL IMPORTANCE OF UPSHAYA:

By determining what elements relieve and aggravate a condition, Upashaya plays a vital part in diagnosis. Trikatu powder, for example, can alleviate obstructive jaundice, although it may exacerbate symptoms. By determining the underlying causes and developing targeted remedies, Upashaya also helps treat illnesses. Vyadhi vipreeta or Hetu Vyadhi vipreeta therapies can be utilized if Hetu vipreeta treatments don't work.

11. SAMPRAPTI:

Vyadhi Samprapti Bodhak Nidana offers a thorough comprehension of the Etiopathogenesis of illnesses, directing the management of a range of illnesses. It describes every step of the process, from exposure to risk factors to the appearance of disease symptoms. Doshic Siddhanta, which entails comprehending the specific pathogenic activities and the impact created by Dosha engaged in a disease process, is the foundation of Ayurvedic treatment (24). The diagnosis, prognosis, and severity of the ailment are all revealed by individual elements like Nidana, Purvarupa, and Rupa. However, applying a logical approach to treatment procedures intended to eliminate all etiopathogenic elements will be made easier with a thorough understanding of the subsequent progress involved throughout the process of Etiopathogenesis.

Sankhya Samprapti, Pradhanya Samprapti, Vidhi Samprapti, Vikalpa Samprapti, Bala Samprapti, and Kala Samprapti are the five categories of Samprapti(25). The predominance of Doshic variables, Roga Marga, and implicated Srotas are used to identify the treatment principles. Reasonable therapy and prevention of Chikitsa Vyapad depend on an understanding of the disease's progression and manifestation in the corresponding Rogamarga(26). Ayurvedic holistic treatment strives to prevent and eradicate disease, as well as its recurrence, secondary manifestations, and complications, by restoring the balance of Dhatu involved in the disease's evolution.

Three Doshas (functional entities), seven Dhatus (structural entities), and three Mala (excretory products) keep the body in equilibrium. Disease arises when etiological causes upset this equilibrium. When vitiated doshas settle at organs or locations that are faulty, it causes Samprapti (Pathogenesis), which results in a variety of ailments. Samanya samprapti (Shatkriyakala six phases) and Vishishta samprapti (Sankhya, Pradhanya, Vidhi, Vikalpa, Bala, Kala) are the two varieties of samprapti. Leprosy, Pidaka, and diarrhea are among the diseases that fall under the Sankhya Samprapti classification system, which is based on particular etiology. With Tama denoting the most prevalent dosha and Tara denoting the predominant dosha, Pradhanya Samprapti aids in determining dosha dominance. It is best to address the dominant dosha first, then the subordinate dosha.

There are four types of Vidhi Samprapti, depending on the prognosis: moderate, acute, incurable, and curable. It aids in assessing the severity of the illness and guards against any losses in Yasha, knowledge, and money (27).

When all causative variables are present, the disease becomes more serious and more difficult to treat because its strength increases with the severity of the dosha provocation. Season, digestion time, day, and night all have an impact on the etiology and symptoms of disease (28). Pittaj Gulma intensifies during digestion, but Vatikaj Gulma increases in intensity after meal digestion. Time or season affects whether a condition is curable or incurable.

Samprapti is a system for classifying diseases according to certain criteria, like when they first appear or worsen. Diseases appear instantly when the balance of Nidana, Dosha, and Dhatus is upset (29). Exogenous diseases start with pain and later cause dosha disruption, but endogenous diseases start with dosha disruption and pain.

Exogenous insanity can occur as a result of sinful behavior, prior life maturity, childbirth, traveling to cities and towns, and nighttime road crossings. Another crucial factor is the time of the exogenous insanity attack.

The incorrect, excessive, or insufficient appearance of symptoms during specific seasons, food digestion, and different times of day and night are the causes of temporal disorders, also known as *Kaalaja Vyadhi* (30). Temporal disorders include *trutiya*, *chaturthaka*, *anyedyushka*, *satata*, and chronic fever type.

Age and mortality are caused by temporal variables, which in turn give birth to natural temporal diseases. If the soul has not entered, conception does not take place, even during fertilization (31). When poison enters seven *Kalas*, snake poisoning stages begin. The period of time that poison leaves one Kala and moves to another is called *Vegantara*.

The six stages of a disease's pathogenesis are known as *Kriya Kaala*, and these are the reasons to seek medical assistance. Pitta and *Kapha* are the phases for the pathogenesis of any disease, whereas *Samchaya* is the initial stage following ingestion of causative elements.

12. LAKSHANA:

The most prevalent *Jwara* symptoms are at *Vataja*, *Pittaja*, and *Kaphaja*, though they might vary depending on when they appear. The patient may experience chronic problems as a result of these symptoms. Menstrual abnormalities can cause drowsiness, eyesight, tears, and other problems (32). In addition, premature sexual activity can result in instant death on the first day, immediate death on the second day, and a malformed or short-lived kid on the third day.

13. CONCLUSION:

Nidan Panchak provides detailed information on illnesses and their treatments, aiding in early diagnosis, differentiation, and understanding disease stages. It also aids in Upashaya, a holistic approach to disease treatment that considers medication, diet, lifestyle, and examination techniques. Ayurveda aims to protect people from illness and death, focusing on the causes, etiopathogenic factors, and genesis of diseases. Diagnosis is crucial in all Ayurvedic systems

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