

AYURVEDA VIEW ON PRAMEHA W.S.R. TO ROLE OF GENETICS FACTORS

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ABSTRACT

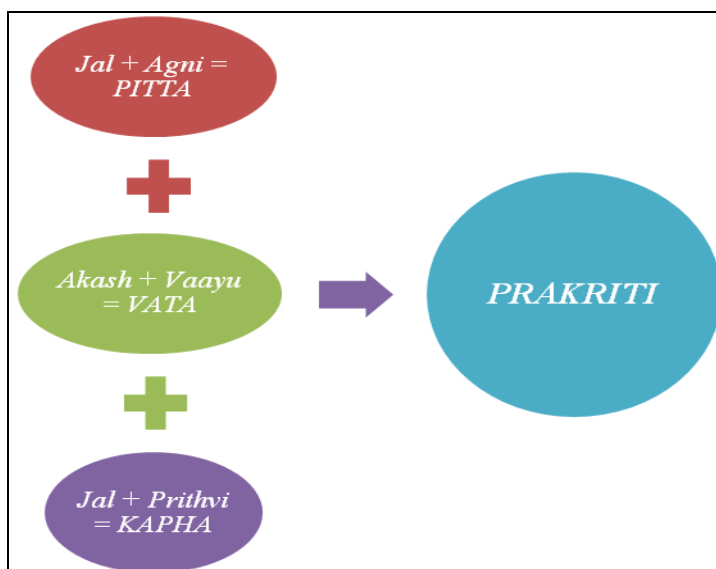
The ancient practice of Indian medicine merely works around theories and principles of Ayurveda science. The *Ayurvedic* scholars explained various theories related to the disease and health management, Genetics is one of them which involve characteristics transmission from generation to generation. Ayurveda describe genetics with the help of concept of basic units like *Beeja*, *Beejabhag* and *Beejabhagavayav*. *Prakriti* is also considered important for genetics. Hereditary and congenital types of diseases are classified by some ancient scholars. *Ayurveda* mentioned different types of hereditary diseases like *Prameha* which may also occur due to the improper lifestyle, lack of exercise and faulty dietary habits. According to some *Ayurvedic* literature, *Prameha* is a *Kulaj Vikara* and occurs as a result of *Beej Dosh*.

KEYWORDS: Genetics, Prameha, Dosha, Prakriti, Ayurveda.

INTRODUCTION

Ayurveda is a science of life which keeps its focus on macro as well as micro things. According to *Ayurveda*, all the living and non-living things are made up of the *Panchamahabhuta* (five elementary principles). These are derived from the three energies of nature known as *Prakriti* mentioned in **Figure 1**. According to some scholars, *Prakriti* is considered as the constitutional type

of an individual which indicates the physical, physiological and mental features. This is based on different combinations of *Tridosha* (*Vata*, *Pitta*, *Kapha*). Every individual has different proportions of *Tridosha* in their body which are determined genetically. Phenotypic differences are result of *Kulanupatini* (familial characteristics), *Jatiprasakta* (ethnicity) and *Deshanupatini* (geo-climatic regions).

**Figure 1: Tridosha and formation of Prakriti.**

Prameha

Anidra, faulty lifestyle and genetic history, etc. enhances incidence of *Prameha* which can cause damage to various systems of the body including blood vessels, heart and kidney etc. *Prameha* is considered as *Anushangi Vyadhi* and *Tridoshaj vyadhi* which occurs due to increase in *Dushyas* like *Meda*, *Mamsa*, *Ras*, *Rakta*, *Majja*, *Vasai* and *Kled*, etc. *Sharir shaithilya* is the major cause of *Prameha*. It is a life threatening disease belonging to *Mutravaha*, *Medovaha* and *Annavaha Srotas*. Lifestyle and faulty eating habits are the major factors responsible for *Prameha* and *Madhumeha*. *Prameha* has bad prognosis and thus included in *Mahagada* group by some great scholars.

Symptoms of Prameha

- *Prabhoot Mutrata*
- *Avilmutrata*
- *Malin Danta*
- *Sweda*
- *Shithilangata*
- *Trishna*

Classification of Prameha

Twenty types of *Prameha* have been described in Ayurveda.

On the basis of Doshas

- ***Kaphaja Prameha*** -Total 10 in number. They are *Sadhya* (curable).
Ex- *Udak meha*, *Shukra meha*, *Sikata meha*, *Sandrameha*, *Sandraprasad mehai* and *Shukla meha* etc.

- ***Pittaja Prameha*** – Total 6 in number. All *Pittaj Pramehas* are *Yapya* (manageable).

Ex- *Ksharmeha*, *Nilameha*, *Manjishtha Meha*, *Kala Meha*, *Rakta Meha* and *Haridra Meha*.

- ***Vataja Prameha*** – Total 4 in count and are *Asadhya* (incurable).

Ex- *Vasa Meha*, *Majja Meha*, *Hastimeha* and *Lasikameha*.

On the basis of etiology:

- ***Sahaja (hereditary)*** - *Sahaja Prameha* occurs as a result of *Bija Dosa* i.e. genetic origin. It is considered as *Asadhya*.
- ***Apathyanimittaja (acquired)*** - It occurs due to improper *Ahara* and *Vihara*.

On basis of prognosis:

- ***Sadhya*** -These are new case without complications. They are curable ex:- *Kaphaja*, *Sthula*, *Apathyanimittaja* etc.
- ***Yapya*** -*Pittaja Prameha*.
- ***Asadhya*** - *Vataja*, *Jatapramehi*.

Nidana (Causes) of Prameha

Many scholars have described the etiological factors into *Nidansthana*. Generally etiological factors of *Prameha* are classified into *Sahaja* and *Apathyanimittaja* as mentioned in **Figure 2**. Various literatures have accepted the concept of hereditary factors and overuse of *Madhura Rasa* by mother during *Garbhavastha* as a cause of *Prameha*.

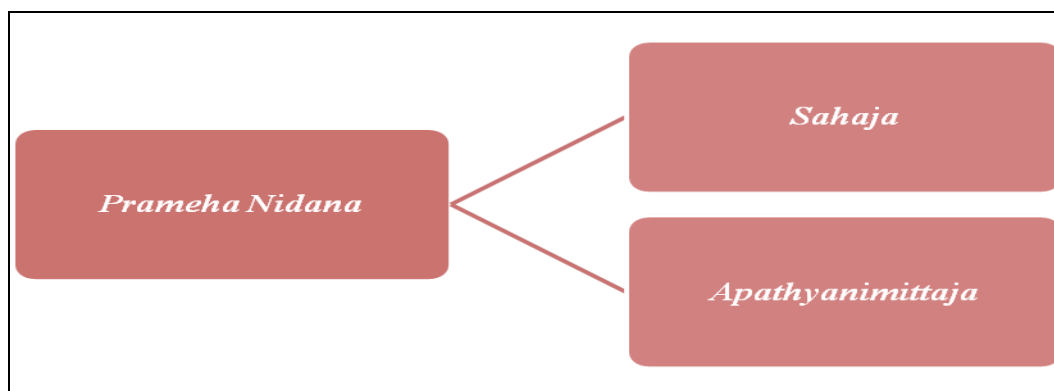


Figure 2: Types of Prameha Nidana.

Sahaja Prameha (Hereditary)/Role of Genetics

In some Ayurvedic literature term *Adibala Pravritta Vyadhi* indicates the diseases which are congenital in origin and genetically determined like *Dusta Arswa*, *Prameha* etc. These are manifested due to the vitiation of *Shukra* and *Shonita* of father and mother. *Sahaja Prameha* is the disease which occurs due to hereditary influence. It is divided into *Kulaja* and *Garbhaja Prameha*. *Kulaja Prameha* (Hereditary) occurs due to certain defects in *Beeja* (ovum and sperm) also known as *Matra-Pitra Beejadoshakrita*. *Beeja Dosha* can originate from either of parents or both father and mother. It can

be transferred from one generation to another. *Garbhaja Prameha* occurs due to excessive intake of *Madhura Rasa* by the pregnant mother and can cause changes and damage to the fetus. In *Sahaja Prameha*, *Roopas* are interlinked as *Alpasheetva* which leads to *Krushata* and *Rookshata*. These *Rupas* may result in *Madhumeha*.

Ayurveda mentions genetics in terms of *Beeja* (Sperm and ovum), *Beejabhaga* (Chromosome) and *Beejabhagaavayava* (Genes). The *Shukra* (male gamete) and *Shonita* (female gamete) can be considered as basic entity *Beeja*. They carry genetically coded instructions

responsible for different traits. *Beejabhaga* refers to the chromosomes which are passed on as units from generation to generation. *Beejabhagavayava* refers to gene which is the basic physical and functional unit of heredity mainly responsible for expression of a particular trait in an individual.

Prakriti is mentioned as the genetically determined relative proportion of *Doshas* within the normal range. *Prakriti* is the basic factor which remains unaltered during the lifetime determined at conception with contribution of environmental factors like *Dosaja*, *Kalaja*, *Garbhasaya* etc. *Shukradhatu* is also a constituent of the *Sahaj Prameha*. Its main function is to maintain *Dehabala*. Vitiation of *Vata* can cause depletion of *Shukra Dhatu* and thus *Prameha*.

Various factors are responsible for *Prameha* such as *Garbhakala*, *Shaithilya*, *Meda Asarata*, *Kapha Prakopa*, *Mansavahasrotadushti*, *Meda Vriddhi*, *Avyayama*, *Divasvapna* and *Medovahasrotadushti*, etc. All this varies according to individual's *Prakriti* which is based on genetic makeup of individual. Some researches show that *Prameha* cases were more in persons of *Prakriti* with deranged *Vata*, *Kapha*, *Pitta* than in individual with normal *Tridosha Prakriti*.

Apathyanimittaja Prameha (acquired)

This occurs due to *Asyasukh*, *Payamsi*, *Swapnasukha* and *Navannapanum*, etc. Some activities like *Vagadharna*, *Anindra* increases *Vata Dosha* leading to *Vataja Prameha*. *Viruddh Ahara*, excess intake of *Ushna*, *Lavana*, *Amla* can increase *Pitta Dosha* and thus can result into *Pittaja Prameha*. Sometimes excessive intake of milk, wine, curd products, sedentary lifestyle, lack of physical exercise, eating fresh pulses with excess of *Ghrta* can vitiate *Kapha Dosha* and thus can cause *Kaphaja Prameha*.

CONCLUSION

The word '*Prameha*' means '*Prakarshena Mehati*' i.e. frequent urination and increased quantity of urine. *Prameha* is disease of *Mutravaha Srotasa* having *Kapha* dominancy. *Prameha* is of two types; *Sahaja* and *Apathyanimittaja*. *Ayurveda* tries to provide a universal perspective to the life, health, and even to cell and molecular biology, thus covers all aspects of life including genetic and phenotypic. According to *Ayurveda*, *Prameha* can be hereditary (*Sahaja Prameha*), it can be transferred from one generation to another through *Beeja Dosha*. *Ayurveda* considers holistic approach in management of *Prameha* by *Nidana Parivarjana*, *Shodhana*, *Shamana* and *Pathya Aahar Vihar*.

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