



**REVIEW ARTICLE ON ROLE OF *OJAKSHAYA* IN ETIOPATHOGENESIS OF
MADHUMEHA.**

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ABSTRACT

Ayurveda is the science of life and its main is to maintain healthy status of healthy living being i.e., Prevention of disease and treatment of disease. *Oja* as a vital entity of human body which help nourishment. *Oja* is the essence of all *Saptadhatu* from *Rasa* to *Shukra*, on which the strength (*Bala*) of body depends. The classical Ayurveda text describes *Ojakshaya* as one of the *Ojavikara* which may be prevalent in various diseases. The pathogenesis of *Madhumeha* (Diabetes Mellitus) also describes this phenomenon. The prevalence of *Oja Kshaya* can be clinically evaluated in the patients of *Madhumeha* and the same if kept in mind during treatment may arrest the further progress of the disease to complications like Diabetic Retinopathy, Neuropathy etc. In Ayurveda classics *Ojakshaya* is described in relation of *Madhumeha*. So, there will be prevalence of *Ojakshaya* in patient of *Madhumeha* (Diabetes Mellitus). Therefore, in this review article an attempt is made to understand the concept of *Oja* and *Ojakshaya* in diabetes mellitus.

KEYWORDS: *Oja, Madhumeha, Ojakshaya, Ojavikar.*

INTRODUCTION

Sushrut mentioned that the final and excellent gist of *Dhatu* i.e., from *Rasa* to *Shukra Dhatu* is *Ojo* which is said to be *Bala* of individual.^[1] Charak includes *Oja* in *Dash Pranaayatan*.^[2] In Ayurveda *Oja Vikruti* is broadly classified as *Ojo Vistransa*, *Ojo Vyapat* and *Oja Kshaya*.^[3] The deficiency of *Oja*, quantitatively or qualitatively or functionally is called *Oja Kshaya* which is diagnosed on the basis of symptoms. The etiological factor for *Ojo Kshaya* is *Aahara*, *Vihara*, *Mansik*, *Vyadhijanya*, *Vaidhya Pramad* etc.^[4,5] *Oja Kshaya* symptom is also seen in *Grahani*,^[6] *Kshatsheen*,^[7] *Rajayayakskshma*^[8] etc. pathogenesis of *Madhumeha*. *Ojakshaya* is described in pathogenesis of *Madhumeha* so it is also called *Ojomeha*.

Diabetes mellitus is metabolic disorder of multiple aetiologies characterized by hyper glycaemia due to impaired insulin secretion or action or both. According to WHO, in world around 420 million people are suffering from Diabetes mellitus. In India 62 million people (7.1% population) people have Diabetic mellitus. About 1.5 million deaths occur primarily due to diabetes, 2 million from heart diseases, stroke, chronic kidney disease in

which diabetes is an underline cause. So, it is the 8th leading cause of death in India.^[9]

AIMS AND OBJECTIVES

1. To compile, study and evaluate the concept of *Ojas*, *Oja Vikruti* from the available classical literature, commentaries, research works, articles on internet and available information in allied basic science.
2. To study of *Oja Kshaya* in etiopathogenesis of *Madhumeha*.

MATERIAL AND METHODS

This article is based on a review of various Ayurveda classical literatures. Materials related to *Oja*, were collected as well as references were compiled, analysed and discussed for a thorough and in-depth understanding of the concept of *Oja* and *Oja Kshaya* in Diabetes mellitus.

Formation of *Oja*

Oja is present in dormant form in sperms (*Shukra*) and ovum (*Shonit*) of parents.^[10] after conception, it is manifested as the first body component in intra uterine life.^[11] The embryo is nourished and developed from this

essence component.^[12] After birth, *Oja* is formed as essence during the metabolism of each *Dhatu*.^[13]

Circulation of *Oja*

Oja is circulated all over the body with plasma (*Rasa*) and blood (*Rakta*) through channels (*Ojovaha Strotas*). These channels originate from heart.^[14]

Types of *Oja*

Oja is present in two forms: *Para* (supreme) and *Apar* (medicore)^[15]

1. The supreme form (*para*) *Oja* is the most important component responsible for the vitality of life. It is quantity in body is 8 drops (*Bindu*) location of *Para Oja* is heart. It is generally stable in the body in an equilibrium state. Destruction in this component causes death.
2. *Apar Oja* is formed during metabolism of each *Dhatu*. its quantity in body is half Anjali. It is a form of *Sara* of all *Dhatu*. It is responsible for the immunity of body.^[16]

Properties of *Ojas*

Colour: According to Sushrut, it is *Sukla Varna* (clear white) whereas other *Acharyas* have mentioned three colours of *Ojas* i.e., a clear substance with the tinge of red and yellow.

Odour: *Lajagandhi* i.e., with the smell of *Laja*.

Taste: According to Charak, its taste is similar to that of honey i.e., *Madhuras* (sweet) with slight *Kashayatva* (astringent).

Characteristics of *Oja*

Somatmaka (cool like moon), *Snigdha* (unctuous or oily), *Shukla* (white in color), *Sheeta* (cool in nature), *Sthira* (stable or firm), *Sara* (flowing or moving and liquid in nature), *Viviktam* (clear or transparent), *Mridu* (soft in nature), *Mritsnam* (slimy).^[17]

Function of *Ojas*

Destruction of *Oja* residing heart causes death *Oja* which resides in the heart is a *Para* type of *Ojas*, which protect life. *Para Ojas* is a site of *Prana* hence to protect life in the function of *Oja*. *Dhatu*, *Oja* and *Bala* are interdependent constituents of the body. *Oja* enhances stability of *Mamsa Dhatu*. *Oja* increase endurance power. All physical and mental activities run smoothly. *Oja* maintains complexion and voice. *Oja* stimulates functions of five senses and mind, *Oja* maintain integrity of body mind-senses-soul. Energetic state of mind, growth of body and strength depend on *Oja*.

Factors responsible for reduction of *Ojas*.^[18,19]

- *Ativyayama*: Excessive physical exercise
- *Anashana*: Fasting for long period.
- *Chinta*: constant worry.
- Consumption of food which are dry moisture less in nature.

- *Pramitashana*: Consuming very less quantity of food.
- *Vata-Atapa Sevan*: excessive exposure to heavy blows of wind and sun heat.
- *Bhaya*: Grief and sorrow
- *Rukshpana*: Drinking strong wines
- *Prajagar*: Keeping awake at nights.
- Excessive elimination of *Kapha*, *Shonita*, *Shukra* and *Mala*.
- *Kala*: due to old stage
- *Abhigata*- Mental or physical trauma or Injury to *Marma* or vitals parts of the body.
- *Kopa*- Anger.
- *Ativyavaya*- Excessive sex.

Ojo-Vikriti (Abnormalities of *Ojas*)

Oja may get deranged or may suffer from quantity and qualitative loss. According to Sushrut *Ojovikruti* is observed in the form of these three stages chronologically viz. *Ojovisransa*, *Vyapata* and *Ojaksaya* respectively. Where the *Lakshanas* of *Vishrams* indicate beginning of *Karmahani*, that of *Vyapad* indicate *Dosh Dushti* also that produces *Ojogunahani* and *Kshaya* indicates *Pramanatahani*. *Acharya Charak* also explain the symptoms of *Ojakshaya*, the three stages of *Oja Vikriti* may occur in various conditions and diseases ranging from physical and mental fatigue to acute and chronic, mild and severe types of diseases. These stages are as follows.

Symptoms *Ojas Visransa*: (first stage)^[20]

1. *Sandhi Vishlesh* (looseness of joints)
2. *Gatra Sada* (weakness of the body)
3. *Dosha Chyavanam* (provoked *Tri-doshas* move away from their normal seats)
4. *Kriya Sannirodha* (inability to perform normal function).^[25]

Symptoms of *Ojas Vyapad* (second stage)^[21]

1. *Stabha Gurugatrata* (Stiffness and feeling heaviness in the body),
2. *Vata Shopha* (Swelling caused by *Vata Dosh* impairment)
3. *Varna Bheda* (change in complexion or discoloration)
4. *Glani* (exhaustion)
5. *Tandra* (drowsiness or stupor)
6. *Nidra* (sleep)

Symptoms of *Ojas Kshaya* (third stage)^[22]

A. According to Sushrut *Samhita*

1. *Murchha* (unconsciousness or fainting)
2. *Mansakshaya* (decrease of muscles)
3. *Moha* (mental disturbance specially in judgment)
4. *Pralap* (delirium)
5. *Mrityu* (death)

Role of *Oja* as a vitiated factor in *Madhumeha*

In *Madhumeha* there is *Kshaya* of *Aparaja* qualitatively and quantitatively. In Ayurveda, *Madhumeha* is explained as one of the types of *Prameha* where the

patient passes honey like sweet urine. In *Ayurveda* it is described under *Vataja Prameha* which is also known as *Ojomaha* or *Kshaudrameha*. There is an excessive increase in *Kapha*, *Pitta*, *Medas* (adipose tissue) and *Mamsa* (muscular tissue) in the case of those who take in excess, heavy unctuous food and food having sour and saline taste, rice from newly harvested crop and fresh wine. Those who sleep (too much), and have sedentary habits, those who have given up physical & mental exercises and also those who do not adopt elimination therapies. The path of *Vata* is obstructed thereby and so *Vata* together with the *Ojas* come down to reach the *Basti* (urinary bladder including kidneys), causing an obstinate type of disease called *Madhumeha* (Diabetes Mellitus)

Samprapti of Madhumeha

Madhumeha is imbalance between *Tridosha* especially *Kapha* and *Pitta* blocking the *Vata*. This blocks the channels related to *Mamsa* and *Meda*. Due to obstruction in *Vata*, the taste of sweet *Oja* is altered into sweet, astringent taste this taste is similar to honey and is discharged through the urine. *Madhumeha* is a urinary disorder whether the urine becomes sweet like honey and quantity greatly increase, quality is more astringent, pale colour and turbid. The whole body becomes *Madhumehi*. This stage if left untreated which is incurable. The *Oja* plays active role in *Madhumeha*. *Oja* excreted through urine causes *Ojakshaya*. When *Oja* due to influence of *Vata* adopt *Kshaya* and *Ruksh Guna* and gets into urinary bladder, it causes *Madhumeha*.

DISCUSSION

In urinary obstinate to disease (*Madhumeha*) *Oja* is one among the ten vitiated factors^[23] Type 1 diabetes mellitus is an auto immune disorder and the destruction of body tissue by auto antibody is very fast cause loss of immune-intolerance and immune-component (*Oja*) thus impairing the body defence mechanism. There is disturbance in the production and clearance of lipoprotein causing hampered function of insulin resulting in hyperglycaemia and producing micro-vascular complication like retinopathy and nephropathy. Diabetes (*Madhumeha*) is caused when *Oja* is taken to the urinary bladder from its own site by vitiated *Vata Dosha*.^[24] this condition is incurable due to its severity, susceptibility to complication (*Maha Atyayitvat*) contradictory treatment options (*Virudhop-Kramatvat*).^[25]

CONCLUSION

Essence of all seven *Dhatus* is called as *Ojas*, on which strength of the body depends. The word strength is applied to many concepts. Its deficiency leads to disease. The entire metabolic activities occurring in the human body throughout the lifetime are primarily dependent on *Oja*. *Ojakshaya* is seen in the etiopathogenesis of diabetes mellitus complications so the treatment should be based on increasing the *Oja* or immunity along with controlling glucose levels of the patients.

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