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**Review Article** 

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# AN OBSERVATIONAL STUDY ON NIDANAS OF PRAMEHA W.S.R TO DIABETES MELLITUS (TYPE-2)

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#### **ABSTRACT**

In Ayurveda, *Prameha roga* refers to a set of urinary disorders. It is also strongly associated with other systems like Gastro intestinal (G.I), Lymphatic, Endocrinal, Circulatory system etc. *Acharya Sushruta* mentioned *Prameha* is one of the serious diseases and included in *Ashta Mahagada*. Due to lack of proper management it becomes *Asadhya* in later stage. *Sahaja* (Hereditary) and *Apathyanimittaja* (due to *sevan* of *apathya ahara & vihara*) are common *nidanas* in *Prameha* manifestation in Ayurveda Science. According to modern science Diabetes is a group of metabolic disease, characterized by hyperglycemia resulting from defects in insulin secretion, insulin action or both. According to WHO (survey 2016), 422 million adults are living with Diabetes Mellitus, 1.6 Million deaths are directly

attributed to Diabetes each year. Diabetes will be the 7<sup>th</sup> leading cause of death in 2030. Further in this Article observational study on *Nidanas* of *Prameha* w.s.r to Diabetes Mellitus is highlighted.

**KEYWORDS:** *Prameha*, *Nidanas*, Observational study, Diabetes Mellitus.

#### INTRODUCTION

There is increased frequency of micturition and increased urinary output in this disease. Therefore it is called *Prameha* (*prakarshen mehati eti prameha* / *prabhut avila mutrata*).

In Ayurveda, there are 20 types of *Prameha*. 4 types of *Vata*, 6 types of *Pitta* & 10 types of *Kapha*.

The Diabetes Mellitus has been generally classified into type-I and type-2. The type-I Diabetes Mellitus is more rapidly to *Dhatuapakarshana janya Prameha* while the type-II Diabetes Mellitus resembles to *Avaranajanya Prameha*. In the pathogenesis of *Avaranajanya Prameha*, *Kapha* and *Pitta* are the common *Dosha*, while the most essential *Dushyas* are *Meda* & *Kleda*.

According to Acharya *Sushruta, Sahaja* (Hereditary) and *Apathyanimittaja* (due to *sevan* of *apathy ahara* & *vihara*) are common *nidanas* in *Prameha* manifestation.

Acharya Charaka clearly mentioned *nidanas* of *Prameha in Charaka Chikitsa sthan* 6<sup>th</sup> chapter which are "ashyasukham swapnasukham dadhini gramyodaka anuprasah payansi, navannapanam guda vaikrutam cha prameha hetu kaphakruchha sarvam".

In modern science lifestyle factors (sedentary life) and genetic factors are primarily causes of Diabetes Mellitus.

According to the modern science 2 types of Diabetes are referred as: Type 1DM (Insulin Dependent Diabetes Mellitus - IDDM) or Juvenile Diabetes, Type 2DM (Non Insulin Dependent Diabetes Mellitus - NIDDM) or adult onset Diabetes. Other types of Diabetes are: Gestational Diabetes, LADA (Latent Auto immune Diabetes of Adults), MRDM (Malnutrition Related Diabetes Mellitus), Congenital Diabetes & Steroid Diabetes. Symptoms of high blood sugar include frequent urination, increased thirst, increased hunger & loss of weight.

In the 21st century, because of invention of new technology, man's life become more mechanical and having less effort to do anything. There is increasing stress and strain which leads to various diseases like Hypertension, Arthritis, Cardiac disease and most harmful Diabetes Mellitus.

Diabetes is a group of metabolic disease, characterized by hyperglycemia resulting from defects in insulin secretion, insulin action or both. Normally, blood glucose level is tightly controlled by insulin which is produced by the pancreas. In patient with diabetes, the absence or insufficient production of insulin causes hyperglycemia. It alters metabolism of

carbohydrates, proteins and fat in the body. It characterized by high level of blood glucose and subsequent excretions through urine.

Diabetes Mellitus has become most common and most challenging disease for medical science to cure like Heart diseases, Hypertension, Cerebro vascular diseases, Diabetic foot or ulcers, Diabetic Ratinopathy, Diabetic Nephro pathy and ketoacidosis etc.

Diabetes Mellitus is a major health problem for the world in the 21st century. Globally, an estimated 422 million adults are living with Diabetes Mellitus, 1.6 Million deaths are directly attributed to Diabetes each year & At least 50% of all people with Diabetes are undiagnosed, due to Diabetes a person's risk of death become double. W.H.O projects that Diabetes will be the 7<sup>th</sup> leading cause of death in 2030.

#### DISCUSSION ON NIDANAS OF PRAMEHA & DIABETES MELLITUS

In Ayurvedic science that mentioned *hetus* related to *Aharaj*, *hetus* related to *Viharaj*, *hetus* related to *Manasika* which is known factors in manifestion of *Prameha vyadhi*.

1. Aharaj related hetus of Prameha which observed in maximum number of patients were having -

Payaha (Sp. Buffalo milk & products),

Shleshma janaka Ahara (sira, lassi, milk shake, paneer etc),

Sheeta dravya (fredge items, cold drinks etc),

Madhura rasa (Guda, sira, sweet dishes etc),

Amla-Lavana rasa (Pickles, papad, amla, imli chuteny, lemon soda, etc),

Snighdha dravya (fried items, curd, parotha with butter etc),

Drava Annapan (rice, watermelon, juice etc),

Guru Dravya (fried bread, parotha etc),

Picchila dravya (cake, prestige, cheez, pizza etc).

Maximum patients were habitual to *Kapha-Medo vardhaka Ahara*. This data reveals to the causative factors described in Ayurvedic classics for *Prameha*.

Modern science also reveals that excessive intake of fatty and carbohydrate substances affects metabolism adversely.

**2.** *Viharaj* **related** *hetus* of *Prameha* which observed in maximum number of patients were having -

Ashyasukham (excessive relaxation over relaxable bed, chair etc),

Swapnasukham (excessive sleep over soft bed etc),

Avyayam (no exercise),

*Diwaswap* (day sleep sp. Post meal) were present in maximum patients.

In case of Vihara Nidana Ashyasukham, Swapnasukham, Avyayam & Diwaswapna emerged as a common causes for Prameha.

Ayurvedic explanation about *Nidra* that *diwasapa* and *prabhutaadhika nidra* provokes *Kapha dosha*. This provoked *Kapha dosha* leads *Medovriddhi* and vitiation of *meda*.

**3.** *Manas* **related** *hetus* of *Prameha* which observed in maximum number of patients were having -

*Vishad* (heaviness in mind, sad feeling of gloom etc) & *Chinta* both were present in maximum patients.

These *Manas hetus* are *Vata prakopaka* which may leads to *Vataja Prameha*.

In **Modern science**, Diabetes Mellitus is primarily due to lifestyle factors and genetics. A number of lifestyle factors are known to be important to the development of type 2 DM, including obesity (defined by a body mass index of greater than 30), lack of physical activity, poor diet & stress.

Dietary factors also influence the risk of developing type 2 DM. Consumption of sugarsweetened drinks in excess is associated with an increased risk. The type of fats in the diet is also important and eating lots of white rice also may increase the risk of Diabetes.

#### **CONCLUSION**

- 1. Observational study reveals that *Kapha*, *Medo*, *Mutra vardhaka Ahara & Vihara* are the major etilogical factors for *Prameha* which described in Ayurvedic classics also. *Kapha* and *Vata* are chief culprits in *Prameha Roga*. Tendency towards faulty dietary habits and sedentary life style vitiate the *Kapha dosha* and *Medo dhatu* which leads to *Prameha*. This observational study found concordant to this description.
- 2. Modern science also reveals that lifestyle factors (sedentary life) and genetic factors are primarily causes of Diabetes Mellitus.
- 3. Therefore, early diagnosis and timely intervention with proper management is highly essential to prevent the Diabetes Mellitus.

#### **BIBLIOGRAPHY**

- 1. A Text book of *Rogavijnan* and *Vikritivijnan* written by Dr. Rekha N. Jain & Dr. Nand Kumar Y. Thite, 1<sup>st</sup> Edition 2008, Published by Chaukhambha Sanskrit Pratisthanan, Delhi. (Vol.2; Page No 277) Prameha Chapter (Ch.Ni.4/48)
- Madhava Nidana of Sri Madhavakara, by Late Prof. G.D. Singhal, Prof. S.N Tripathi, Prof. K.R.Sharma, English translation, Reprint – 2007, Published by Chaukhambha Sanskrit Pratisthanan, Delhi. (Page No; 559)
- 3. A Text book of Kaya Chikitsa written by Prof. Ajay Kumar Sharma, Edition 2011, Published by Chaukhambha Orientalia, Delhi. (Vol.2; Page No 880), Prameha Chapter
- 4. Charaka Samhita of Agnivesha, Elaborated by Charaka and Dridhabala with Ayurveda Dipika Commentary by Sri Chakrapanidatta, Edited by Vaidya Yadavji Trikamji Acharya, 2011, Published by Chaukhambha Surabharati Prakashana, Varanasi, Uttar Pradesh. (Page No; Vol.1 219, 449, 760 & Vol.2 1039) (Ch.Ni.4/3)
- 5. Sushruta Samhita of Maharsi Sushruta, Hindi commentary by Kaviraja Ambikadutta Shastri, Forwarded by Dr. Pranajivana Manekchanda Mehta, Edition: Reprint 2013, Chaukhambha Sanskrit Sansthan, Varanasi Uttar Pradesh. (Page No; Vol.1 Ni 325, Chi 74) (Su.Ni 6/27)
- 6. Astanga Hrdayam of Srimad Vagbhata, Edited with Nirmala Hindi Commentary, by Dr. Brahmanand Tripathi, Edition: Reprint 2015, Published by Chaukhambha Sanskrit Pratisthanan, Delhi. (Page No; 494, 715)
- 7. Davidson, Sir Stanley, Davidson's principles and Practice of Medicine, Edited by Christopher Haslett, Edwin R. Chilvers, John A.A.Hunter, Nicholas A. Cambridge (Page No.-836).
- 8. Harrison, Dr. J.Larry Jameson, Harrison's Principles of international medicine, vol-2,15th Edition, and published by MC Graw-Hill Book, Page No- 245.
- 9. Diabetes annual 2002, edited by Anthony H Barnett, published in the United Kingdom in 2002.
- 10. Essentials of medical Physiology by K. Sembulingam Prema Sembulingam, 6<sup>th</sup> Edition, Published by Jaypee Brothers Medical Publishers, 2012. Page No. 329, 334, 421 to 423.
- 11. Medicinenet.com/diabetes, Britannica.com/diabetes, Medicinenet.com/diabetes, Wikipedia.org/W.H.O, Wikipedia.org/diabetes, Researchgate.net/diabetes
- 12. World Journal of Pharmacy and Pharmaceutical Sciences, ISSN 2278-4357, Diagnostic & Prognostic understanding of Prameha / Madhumeha with urine examinations by Dr. Rajeev Kumar.

- 13. Asian Journal of Biomedical and Pharmaceutical Sciences, ISSN: 2249 622X, Diabetes Mellitus A devastating metabolic disorder by M.N. Piero.
- 14. International Ayurvedic Medical Journal, ISSN: 2320 5091, a review article on Diabetes Mellitus An Ayurvedic Approach by Pratibha.