A REVIEW ON THE EFFECT OF DIET AND PANCHKARMA IN MANAGEMENT OF MADHUMEHA W.S.R TO DIABETES MELLITUS

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ABSTRACT

Madhumeha is one of the four types of Vatika Prameha. The etiological factors behind Madhumeha is intake of food substances having Guru, Snighdha qualities and excessive indulgence of Amla and Lavan Rasa substances, excessive sleep, sitting in a same place for longer duration, avoiding exercises and excess thinking or depression. Madhumeha is correlated with diabetes mellitus. Diabetes mellitus is becoming fastest considerable disease in the world. Based on current trend, it is believed that 438 million individuals will have Diabetes by the year 2030. Modern system of medicine is not successful in preventing and managing life style disorders. In the Ayurvedic principles, the appropriate answer to inhibit the lifestyle disorders like Madhmeha is Ahara. As Ayurveda consider Nidana Parivarjana is the main line of treatment and even applicable in case of Madhumeha. Ahara is said to be “MahabhaIsaiya” by Kashyap Acharya. Ayurvedic approach towards the treatment of Madhumeha includes internal administration of drugs and life style modifications. Panchkarma procedures like Vamana, Virechana, Basti, Takradhara can bring down blood sugar levels with negligible side effects. In short purification of the body and life style modifications can alter the imbalance of body and mind, thereby total imbalance of humors can be corrected is the concept of Ayurvedic Panchkarma. Therefore an attempt has been made to highlight the role of Diet and Panchkarma in the prevention and management of Madhumeha described in the classics of Ayurveda.

Keywords: Madhumeha, Diabetes mellitus, Ahara, Lifestyle, Ayurveda

INTRODUCTION

Life style disorders are diseases which are associated mainly with the way a person or group of people lives. Diabetes mellitus is a life style disorder and it is becoming fastest considerable disease in the world. It is estimated that total number of people with Diabetes will rise to 366 million by 2030. It is going to take the form of epidemic in the coming century, if proper preventive measures are not taken. Approximately 1% of population is suffering from Diabetes mellitus. In developed countries it is rising at the rate of about 10% every year. International Diabetes Federation on 14th November on world Diabetes day review that nearly 46% of 415 million adults living with Diabetes are unaware of their condition. Epidemiological studies showed that type2 diabetes is associated with over eating, especially when combined with obesity and under activity1. Modern system of medicine is successful in preventing and managing infectious diseases, but it is difficult to prevent life style disorders alone with it. It is the need of time to review the ancient systems of medicine in order to apply the principles mentioned in ancient systems to prevent and manage the life style disorders. Diabetes mellitus is attracting global importance. It is prevalent and known since ancient period. According to Ayurveda DM can be
correlated to Madhumeha which is a subtype of Prameha. Prameha is Tridoshaj (Vata, Pitta & Kapha) Vyadhi with predominant Kapha. Madhumeha is a type of Vataj Prameha which is characterized by passing of sweet taste honey like urine in excess amount.

Ahara plays an important role in healthy and in diseased persons. So consumption of food by following proper Pathya and Apathya is beneficial in preventing the diseases like Diabetes. Pathya can be ultimately understood as the food which suits any condition of the body. It may be in form of Satmya, Hita, Upashaya that ultimately provides health to the individual. To have a healthy life, one should have the awareness regarding proper diet, its dose, time, place the food having all those qualities which becomes Hita to the mind, body through Srotas and thus produces health. Ayurvedic texts also describe preventive measures like Dincharya, Ritucharya, Ratricharya, Vegavidharna in order to prevent the lifestyle disorders.

Ayurvedic texts describe Shodhana and Shaman therapy for the management of Madhumeha. Shodhan includes Yamana, Virechana and Basti karma. These Panchkarma procedures act by removing toxins from the body and relieving stress. These procedures bring down the blood sugar levels with no side effects. The use of herbal medicines after Bio purification of body is more effective. These Panchkarma Procedures are also useful in complications of DM.

**MATERIAL AND METHODS**

It is a review article. For the present review detailed literary study performed. The etiological factors of Madhumeha, causative factors, signs and symptoms and treatment described in Ayurvedic texts briefly reviewed. Some other Ayurvedic texts and research articles were also analyzed and studied.

<table>
<thead>
<tr>
<th>AHARA</th>
<th>VIHARA</th>
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<tr>
<td>Excessive intake of Nava Anna, Nava Pana (freshly grown grains, fresh beverages)</td>
<td>Excessive indulgence in Nidra (Sleep)</td>
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<tr>
<td>Guru Dravya (milk products, curd etc)</td>
<td>Asya Sukha (Sedentary habits)</td>
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<tr>
<td>Snigdha Dravya</td>
<td>Vayama Varjana (no exercise)</td>
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<tr>
<td>Madhur Dravya</td>
<td>Tyakta Chinta</td>
</tr>
<tr>
<td>Amla &amp; Lavan Dravyas</td>
<td>Samshodhana akurvatam (avoiding purification therapy)</td>
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Two factors are generally responsible for occurrence of Prameha- Hereditary and Dietary factors. According to these causative factors patients can be classified as Sahaj Pramehi and Apathyanimittaja Pramehi.

Sahaj Prameh/Madhumeha: Prameha is described as a Kulaja vikara. It can be inherited to the next generation. The faulty dietary habits and life style of mother during pregnancy can cause Madhumeha in child. Chakrapani also told that the chief cause of defect in Bija (spermatozoa or ovum) is Apathya Sevana (improper dietary habits) by the parents.

Apathyanimittaja Prameh/Madhumeha: Sedantary life style, excessive sleep, faulty dietary habits, and lack of exercise these causative factors lead to the vitiation of Doshas and give rise to Prameha.

**CLASSIFICATION OF PRAMEHA**
1 Prameha is classified aetiologically into Sahaj (Hereditary) and Apathyanimitta (Unwholesome things – food and exercise etc.).

2 According to physical management Aptarpana Uthaja Prameha - describing the lean diabetic.
Santarpana Uthaja Prameha- related with the obese diabetic.

3 According to Dosha- Pramehas are classified into twenty types. Vataj Prameha – There are totally 4 Vataj Prameha. Madhumeha is a type of this.
Pittaj Prameha – There are totally 6 Pittaj Prameha.
Kaphaj Pramehas – There are totally 10 Kaphaj Prameha.

**ROLE OF AHAR (DIET) IN MADHUMEHA**

<table>
<thead>
<tr>
<th>Ahara Varga (cereals and millets)</th>
<th>Dravya</th>
<th>Properties of Dravyas</th>
</tr>
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<tbody>
<tr>
<td>Dhanya varga</td>
<td>Yava, Godhuma, Shastika shali, barley are best can be given in form of Mantha, Odana, Roti etc.</td>
<td>It is having Kashaya and Madhura rasa, Katu Vipaka, Mrudu, Rooksha, Lekhana Guna, Medonashaka</td>
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</tbody>
</table>

| Shakavarga (vegetables) | Karela (Bitter guard), Methi, Kushmanda, Rasona, Udumbara, Palandu | Tiktarasa, Laghu, Ruksha, Ushna Virya, Katu Vipaka |

| Phala varga (fruits) | Jambu, Amalaki, Utpala, Kapittha, Kalinga | Kashaya Madhura Amla Rasa, Laghu Ruksha Guna, Sheeta Virya, Madhura Vipaka |

| Taila varga (oils) | Sarshapa Taila, Danti Taila, Ingudi Taila, Alsi Taila | Madhura, Natyushna, Guru, Tikna |

Approximately 50% of the new cases of diabetes can be controlled by diet alone. The plate of diabetic patient should be as follow-

- ½ of plate should be filled with non starchy vegetables like cucumber, broccoli, carrots, salad, tomatoes or cauliflower.
- ¼ of plate should be filled with whole grains or starchy food such as chapatti of barley, corn or pea.
- ¼ of plate should be proteins like fish, lentils and poultry.
- Whole grains with low glycemic index like barley flour, red or brown rice should be taken.
- Rather than taking three large meals, try eating small meals frequently, i.e. 3 regular, average- sized meals should also be complemented with 3 light snacks in between.

**Role of Panchkarma in Madhumeha**
Panchkarma is Ayurveda’s primary purification and detoxification treatment. The unique feature of Panchkarma therapy is to destroy the disease from the root level which is beautifully quoted by Acharya Charak as follows-if the plant is destroyed except root, then it grows again, in the same way if bio-humors are not destroyed from the root, they again cause diseases. Bio-purification therapy acts on the root sites of humors and remove them from the body, so that there is no further nutrition to the other sites of bio-humor leading to a healthy condition. The Ayurvedic classics categorically emphasized that Bio-purification of both body and mind is
essential pre-requisite for administration of Shaman therapy, also Rasayan therapy. Bio-purification is essential to obtain effects of rejuvenation and aphrodisiac action of drug. In Madhumeha also, if the Shaman drug will be given after Shodhana then it will be more effective. Ayurveda Panchkarma procedures like Vaman, Virechana and Basti are mentioned in treatment of Diabetes mellitus.

**Role of Shodhana As Preventive Measure in Madhumeha**

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**Table 3: Panchkarma procedures**

<table>
<thead>
<tr>
<th>Panch karma</th>
<th>Procedure</th>
<th>Materials</th>
<th>Probable mode of action</th>
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<tbody>
<tr>
<td><strong>PURVA KARMA</strong></td>
<td>Udvartan</td>
<td>Udvartan can be done with Haritaki, Trifala, Yava, Madhuyashti, Vacha, Kulathi, Masha.</td>
<td>In Udvartan, Ruksha dravyas are applied in opposite sequence. Due to mechanical effect, the dirty particles over hair follicles are removed. Therefore cleansing of minute channels occurs. On the other hand pressure is also transmitted to deeper tissues which enhance venous circulation and lymphatic drainage.</td>
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<td></td>
<td>Snehana</td>
<td>Internal Snehana can be done with Trifala ghrita, Panchtikta ghrita, Nimba ghrita etc.</td>
<td>Shodhana Snehapana liquefies the Dosha-dushya samurchhana may dissolve fat soluble amyloid deposition leading to proliferation of insulin secretary cells. Abhyanga is useful in relaxing muscles, which provides a sense of well-being. This helps to improve circulation which further causes increased glucose absorption and the amount of insulin required for impaired glucose levels also decreased.</td>
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<td></td>
<td>Svedana</td>
<td>Medicated herbal steam (Dashmoola Kwatha)</td>
<td>Sveda or medicated herbal steam bath opens the pores, flushes and cleanses the system through skin and toxins are excreted through sweat.</td>
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<td><strong>PRADHAN KARMA</strong></td>
<td>Vaman</td>
<td>Medicinal paste made up of Madanphala, Vacha churna, Saindhav lavan and honey or medicinal decoction is given to the patient.</td>
<td>Vaman &amp; Virechana drugs are mild irritant to the stomach and the intestinal mucosa respectively, to cause inflammation. Due to this, the permeability of the membrane changes and some toxins come out due to the</td>
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For Virechana Trifala Churna, Haritaki Churna, Castor oil can be given to the patient.

Basti Niruha Basti has gained importance in treatment of Diabetes mellitus. Acharya has mentioned Panchtikta Panchprasritik Basti, Madhutailka Basti, Somvalkadi Basti, Saindhavadi Niruha Basti in Prameh.

**PASCHAAT KARMA**

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<th>Virechana</th>
<th>For Virechana Trifala Churna, Haritaki Churna, Castor oil can be given to the patient.</th>
<th>changed permeability which cannot come out in normal condition. This also facilitates quick absorption of the active principles (Veerya) of the drug in initial stage.</th>
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<td><strong>DISCUSSION</strong></td>
<td>Diabetes is a major public health problem that is approaching epidemic proportions globally. There is an urgent need for strategies to lower the raising prevalence of this disease. Minor changes in our eating habits and lifestyle changes can greatly reduce our chances of getting this disease. In Diabetes Mellitus Panchkarma act as preventive as well as curative therapy. Timely intervention of the Panchkarma therapy with appropriate medicaments helps in the management and prevention of Diabetes mellitus.</td>
<td>Process of Vaman, Virechana &amp; Aasthapana Basti:</td>
<td><strong>CONCLUSION:</strong> Madhumeha is very common ailment in this mechanical era. Diabetes being a disease of deranged metabolism, special attention should be kept on the condition of digestion and metabolism. Ayurvedic principles of management can help the</td>
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<td><strong>Role of balanced diet:</strong></td>
<td>High consumption of vegetables, fruits, legumes, nuts, fish, cereals leads to high ratio of mono unsaturated fatty acid to saturated fatty acids and they act beneficially against type-2 diabetes mellitus, by reducing oxidative stress and resistance also prevent weight gain and exert a protective effect on development of type2 diabetes.</td>
<td><strong>Due to Ushna, Tikshna, Sukshma, Vyavayi, Vikasi &amp; Anupravana bhava all the toxic materials get excreted through GIT (either in the upward or in the downward direction)</strong>.</td>
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patient to have better blood sugar control and routine life inspite of modern management methods\(^4\). Along with diet Samsodhana therapy i.e. Vaman, Virechana, Basti has significant role in Samprapti vighatan of Madhumeha. By Agni Vridhi & Srotosodhana effect of Samsodhana Karma it activates the insulin secretion as well as reduces peripheral insulin resistance. Hence lifestyle modifications along with proper adopting food habits and Panchkarma procedures have very important role in the management of Madhumeha (Diabetes mellitus).

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