AYURVEDIC MANAGEMENT OF TYPE-II DIABETES MELLITUS - A CASE REPORT

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ABSTRACT

Prameha (Diabetes Mellitus) is a syndrome with disordered metabolism and inappropriate hyperglycemia either due to a deficiency of insulin secretion or due to a combination of insulin resistance and impaired insulin secretion to compensate glucose level in blood. It is observed in Type II Diabetes Mellitus that after some years Blood sugar level is not controlled by Oral hypoglycemic agents and finally the patient need to take insulin to control Blood sugar level. In Ayurveda, we can successfully controlled blood sugar level with Oral hypoglycemic agent along with Oral Ayurvedic medicine & Vijaysaradi Ksheer Basti. Also, it will help to avoid complications of Diabetes.

KEYWORDS: Prameha, Type II Diabetes Mellitus, Oral Ayurvedic medicine, Vijaysaradi Ksheer Basti.

INTRODUCTION

Qualitative and Quantitative impairment in urine is known as Prameha. Pra means excess of urine in both frequency and volume. In this disease excessive urination and turbid urine occurs. It is categorized as Vataja, Pittaja and Kaphaja. The dominance of Kapha Dosha in Prameha defines that the Pittaja and Kaphaja types are easily curable with the medication due to their compatibility with Dushyas they can be grossly co-related with type II Diabetes Mellitus. The Vataja Prameha afflicts the deeper Dhatus (essential tissues) like Majja etc. for which they have serious nature, they are incurable, causes many complications and acute emergency conditions. This type of Prameha can be grossly co-related with type I Diabetes Mellitus. If all forms of Pramehas are not treated eventually develop into Madhumeha.
Diabetes mellitus is a metabolic disorder of carbohydrate, protein and fat characterized by Polyuria, Polydipsia, Polyphagia, Hyperglycemia, Glycosuria and Generalized weakness. This is the disease that affects every tissue and every organ of the body and is responsible for significant morbidity, reduces life expectancy and diminished quality of life. It has been seen that there is no any organ and system spared from the diabetic complications, such as Diabetic nephropathy, Diabetic retinopathy, Diabetic neuropathy etc. In 2008, an estimated 347 million people in the world had Diabetes and the prevalence is growing, particularly in low and middle income countries. India had 72 million people living with Diabetes as per 2017 data.

PATHOGENESIS OF DIABETES IN AYURVEDA

Etiological factors, Doshas and Dhatus concerned with the production of Kaphaja type of Prameha is described here.

Nature of Kapha Dosha
In Prameha main Dosha vitiated is Kapha. Etiological factors manifest Prameha due to Kapha.

Nature of Dushya
Kapha having liquidity in excess in the Dosha involved. Dhatus specially involved in this Prameha are Medas, Mamsa, Vasa, Majja, Kleda, Shukra, Rakta, Lasika and Rasa which latter on known as Ojas.

Pathogenesis
By the favorable combination of all the three specific factors i.e. Etiology, Dosha and Dhatus. Kapha gets immediately aggravated because of excessiveness in quantity. Vitiated Kapha spreads all over the body. While spreading in body it mixed with Meda. The vitiated Kapha along with vitiated Meda gets mixed with Mamsa. The liquid Dhatus of the body are further vitiated and transformed into urine. Controlling organs of the channels carrying urine and the openings of the channels get affected by fat and liquid Dhatus of the body. The vitiated Kapha while coming in contact with the openings of the channels obstructs them. This results in the manifestation of Prameha. All varieties of Prameha, if not treated in time will ultimately become Madhumeha.
CASE STUDY
A 65 years old male patient came to Dr. D. Y. Patil Ayurved Hospital with history of type II Diabetes Mellitus, since 3 years with complaints of Repeated micturition (9-10 times/day, 3-4 times/night), Excessive thirst (4-5 litres/24 hours), Dryness of mouth, Blurred vision, Itching of both hands, Watering from eyes, Weakness, Dyspnoea on exertion, Shoulder joint pain since 15 days.

FAMILY HISTORY & PAST HISTORY
None of family member has history of Prameha. Since long time, he was taking Oral hypoglycemic agent. (Tab. Glynase MF). He was managed accordingly but he didn’t get any relief.

GENERAL EXAMINATION
- Nadi (Pulse)- Kapha-Vata (78 beats/min)
- Mala (Stool) - Samyak (Normal)
- Mutra (Urine) - Bahu (9-10 times/day,3-4 times/night)
- Jivha (Tongue)- Ishit saam (Mild coated)
- Shabda (Voice)- Prakrut (Normal)
- Sparsha (Touch)- Prakrut (Normal)
- Druk(Eye) - Drushtimandya
- Akruti (Build)- Madhyam
- Kshudha(Appetite) - Samyak (Normal)
- Nidra (Sleep)- Khandit
- Weight - 64 kg
- Blood pressure- 130/70 mm of Hg.

SYSTEMIC EXAMINATION
There is no any abnormality detected

SROTASA PARIKSHAN (AFFECTED SROTASA)
- Pranavaha srotasa -Dyspnoea on exertion.
- Udakvaha srotasa -Dryness of mouth, Excessive thirst.
- Rasavaha srotasa -Weakness.
- Mamsavaha srotasa-Itching of both hands.
- Majjavaha srotasa-Shoulder joint pain.
• **Mutravaha srotasa**-Repeated Micturition.
• **Swedavaha srotasa**-Excessive sweating.

**INVESTIGATION**

• **BSL (F & PP) on 17/11/2017**
  BSL (F) - 249 mg/dl
  BSL (PP) - 516 mg/dl

• **Urine (R & M) on 17/11/2017**
  Glucose ++
  Pus cells - 2 to 3
  Epithelial cells - 2 to 3

**DIAGNOSIS**

• Prameha (Type II Diabetes Mellitus).

**TREATMENT GIVEN**

• **Oral Ayurvedic Medicines (Shaman chikitsa)**

<table>
<thead>
<tr>
<th>MEDICATION</th>
<th>DOSE</th>
<th>TIME</th>
<th>MEDIUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madhunehahar vati</td>
<td>250 mg 2 tabs. BD</td>
<td>Before lunch and dinner</td>
<td>Lukewarm water</td>
</tr>
<tr>
<td>Arogyavardhini vati</td>
<td>250 mg 2 tabs. BD</td>
<td>After lunch and dinner</td>
<td>Lukewarm water</td>
</tr>
<tr>
<td>Gokshuradi guggulu</td>
<td>250 mg 2 tabs. BD</td>
<td>After lunch and dinner</td>
<td>Lukewarm water</td>
</tr>
<tr>
<td>Parijatak ghanavati</td>
<td>250 mg 2 tabs. BD</td>
<td>After lunch and dinner</td>
<td>Lukewarm water</td>
</tr>
<tr>
<td>Cap. Rasayan</td>
<td>500 mg 1 tab BD</td>
<td>After lunch and dinner</td>
<td>Lukewarm water</td>
</tr>
</tbody>
</table>

• **Purification Therapy (Shodhan chikitsa)**
  1) **Sarvang snehan (Whole body massage)**-Bala tail for 8 days.
  2) **Sarvang swedan (Whole body fomentation)**- Bashpa sweda for 8 days.
  3) **Vijaysaradi Ksheer Basti** -Vijaysar, Meshshruningi, Haridra, Daruharidra, Khadir, Chitrik (Total - 280 ml) for 8 days.

**CRITERIA FOR ASSESSMENT**

• **Subjective criteria**
  Polyuria
  Polydipsia
  Dryness of mouth
  Dyspnoea on exertion
Weakness
Joint pain

- Objective criteria
BSL (F & PP)
Urine (R & M)

OBSERVATIONS AND RESULTS

- OBSERVATIONS
- Subjective criteria

<table>
<thead>
<tr>
<th>Follow up</th>
<th>1st day</th>
<th>8th day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyuria</td>
<td>9-10 times/day, 3-4 times/night</td>
<td>3-6 times/day, no or rarely at night</td>
</tr>
<tr>
<td>Polydipsia</td>
<td>Increased with frequency of water intake/4-5 litres</td>
<td>Normal/(2-3 litres)</td>
</tr>
<tr>
<td>Dryness of mouth</td>
<td>Feeling of thirst is severe but can be managed by drinking sufficient amount of water</td>
<td>No dryness of mouth</td>
</tr>
<tr>
<td>Dyspnoea on exertion</td>
<td>Often, feeling of Dyspnoea on exertion</td>
<td>Rarely, feeling of Dyspnoea on exertion</td>
</tr>
<tr>
<td>Weakness</td>
<td>Rarely, feeling of weakness</td>
<td>No feeling of weakness</td>
</tr>
</tbody>
</table>

- Objective criteria
BSL (F & PP)

<table>
<thead>
<tr>
<th>Investigation</th>
<th>1st day</th>
<th>8th day</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSL (F)</td>
<td>249 mg/dl</td>
<td>119 mg/dl</td>
</tr>
<tr>
<td>BSL (PP)</td>
<td>516 mg/dl</td>
<td>149 mg/dl</td>
</tr>
</tbody>
</table>

Urine (R & M)

<table>
<thead>
<tr>
<th>Investigation</th>
<th>1st day</th>
<th>8th day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urine (R&amp;M )</td>
<td>Glucose ++</td>
<td>Glucose - Nil</td>
</tr>
<tr>
<td></td>
<td>Pus cells - 2 to 3</td>
<td>Pus cells - 0 to 1</td>
</tr>
<tr>
<td></td>
<td>Epithelial cells - 2 to 3</td>
<td>Epithelial cells - absent</td>
</tr>
</tbody>
</table>

RESULT

- Vijaysardi Ksheer Basti along with Ayurvedic oral medicines can be used effectively for the treatment of Prameha (Type II Diabetes Mellitus).
DISCUSSION

Introduction
Ayurveda has classified Diabetes (Prameha) into mainly 3 types and has further divided into 20 types. Description of Four types of Prameha from management point of view is Sthula Pramehi (Obese Diabetic), Balvan Pramehi (Strong Diabetic), Krisha Pramehi (Lean Diabetic) and Durbal Pramehi (Weak) are classified in Ayurveda. On very similar grounds of Diabetics are classified in Insulin Dependant Diabetes Mellitus (IDDM) and Non-insulin-dependant Diabetes Mellitus (NIDDM) respectively.

Principle of Management
If patient is Sthula and Balavan then give Karshan or Shodhan chikitsa and latter Santarpan is followed. In Krisha and Durbal Prameha give Bruhan chikitsa.

Mode of Action

Oral Ayurvedic medicine (Shaman chikitsa)
Madhumehahar vati contains Tikta, Katu, Kashaya rasa and Ushna virya dravyas which increase the Agni and decreases the Kapha. Decreased Kapha leads to increase the viscosity of Meda and other liquid Dhatus. So, that decreases the urine output. Controlling organs of the channels carrying urine. The Kapha while in contact with the openings of the channels do not obstruct them. So, it decreases the symptoms and normalize the functions of channels. Also, the other drugs used for supportive treatment.

Arogyavardhini vati used for decreasing Kapha and Kleda.
Gokshuradi guggulu used for decreasing Kleda and Mutra.

Parijatak ghanavati used for decreasing the complication of Diabetes mellitus like tingling sensation etc.

Cap. Rasayan used for increasing Bala, Ojas etc.

Purification therapy (Shodhan chikitsa)
Vijaysaradi Ksheer Basti contains Tikta, Katu, Kashaya rasa and Ushna virya dravyas which increase the Agni and decreases the Kapha. Decreased Kapha leads to increase the viscosity of Meda and other liquid Dhatus. So, that decrease the urine output. Controlling organs of the channels carrying urine. The Kapha while in contact with the openings of the channels do not obstruct them. So, it decreases the symptoms and normalize the functions of channels.
obstruct them. So, it decreases the symptoms and normalize the functions of channels. Milk used to process the medicines. It reduces weakness and increases Oja.

In this condition Ksheer Basti plays an important role. Drugs used in Vijaysaradi Ksheer Basti and Madhumehahar vati are proven Anti-diabetic effect and having Tridoshashamaka effect.

Properties of Medicines used in Vijaysaradi Ksheer Basti.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Drugs</th>
<th>Guna</th>
<th>Rasa</th>
<th>Virya</th>
<th>Vipaka</th>
<th>Action on Prameha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vijaysar</td>
<td>Laghu, Ruksha</td>
<td>Kashaya, Tikta</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Kaphapittahar, Rasayan, Mutrasangrhamiya.</td>
</tr>
<tr>
<td>2</td>
<td>Meshshrungi</td>
<td>Laghu, Ruksha</td>
<td>Kashaya, Tikta</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphapittahar, Deepan.</td>
</tr>
<tr>
<td>3</td>
<td>Haridra</td>
<td>Ruksha, Laghu</td>
<td>Tikta, Katu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphapittahar, Amapachana, Kledaghna, Shohan.</td>
</tr>
<tr>
<td>4</td>
<td>Daruharidra</td>
<td>Laghu, Ruksha</td>
<td>Tikta, Kashaya</td>
<td>Ushna</td>
<td>Katu</td>
<td>Kaphapittahar, Rasayan, Shohan, Deepan, Trushnasangrhamiyania.</td>
</tr>
<tr>
<td>5</td>
<td>Khadir</td>
<td>Laghu, Ruksha</td>
<td>Tikta, Kashaya</td>
<td>Sheeta</td>
<td>Katu</td>
<td>Kaphapittahar, Medohar, Pachan, Shohan, Mutrasangrhamiyania.</td>
</tr>
<tr>
<td>6</td>
<td>Chitrak</td>
<td>Laghu, Ruksha, Tikshna</td>
<td>Katu</td>
<td>Ushna</td>
<td>Katu</td>
<td>Vatakaphahar, Deepan, Pachan, Rasayan, Truptighna.</td>
</tr>
</tbody>
</table>

SUMMARY

A single patient was treated with Ayurvedic medicines and Vijaysaradi Ksheer Basti.

- In Oral Ayurvedic medicines (Shaman chikitsa) we used
  1) Madhumehahar vati 2) Arogyavardhini vati 3) Gokshuradi guggulu

- In Purification therapy (Shodhan chikitsa) we used -
  1) Sarvang snehan 2) Sarvang swedan and 3)Vijaysaradi Ksheer Basti which contains Vijaysar, Meshshrungi, Haridra, Daruharidra, Khadir and Chitrak.

Before treatment Fasting blood sugar level was 249 mg/dl and Post prandial blood sugar level was 516 mg/dl and after treatment of 8 days Fasting blood sugar level was 119 mg/dl and Post prandial blood sugar level was 149 mg/dl.
CONCLUSION
Following conclusion can be drawn from current case study.

- The patient was diagnosed on the basis of Ayurvedic concept of Prameha where “Agnimandya” was the core concept lying.
- Panchakarma procedure along with Ayurvedic medicine proved satisfactory effect in Prameha.
- Uncontrolled Blood sugar level with allopathic Oral hypoglycaemic agents can be successfully controlled by Oral Ayurvedic medicine and Purification therapy of Ayurveda.
- Ayurvedic therapy what we used for the patient is cost effective.
- No any adverse effect was noted during and after the study.
- With Ayurvedic therapy, we can prevent diabetic patient from shifting on insulin therapy which is a biggest advantage.
- From this case, it can be concluded that Vijaysaradi Ksheer Basti can be used effectively for the treatment of Prameha (Type II Diabetes Mellitus).

REFERENCES