

Ayurvedic Management of Prameha: A Case Study

Case Report

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Abstract

Prameha is becoming a fearsome disease condition in a current scenario. It is known as silent killer in today's society. *Prameha is shleshma pradhana tridoshaja vyadhi* which is characterised by frequent and turbid urination. It can be divided into three types based on *doshik* predominance which is also subdivided into further types they are *Kaphaja* into 10 types, *Pittaja* into 6 types, *Vataja* into 4 types which is also *Avasthanusara* bheda of this *vyadhi*. Based on the *Chikitsa* aspect it can be also classified as *sthoala pramehi* and *krusha pramehi*. Clinical feature of *Prameha vyadhi* correlates with Diabetes mellitus. Diabetes Mellitus is Global burden due to its mortality and morbidity. Inappropriate lifestyle and diet pattern is the root cause of diabetes mellitus. Present case study deals with a 67 years old male patient with increased frequency of micturition and excessive hunger, from 6 months with FBS level of 160 mg/dl. Ayurvedic diagnosis of *Prameha* was made based on *pratyatma lakshana* and managed with *Pramehahara aushadha* named *Mamejaka ghanavati*, with medicine strict diet control and regular exercise was advised up to 30 days. Patient was withdrawn from Tab Metformin 500 once a day with controlled FBS. Maximum improvement was noticed at the end of treatment. In this single case study, an attempt was made to control *prameha vyadhi* by identifying and avoiding risk factors and following strict diet according to Ayurveda.

Key Words: *Prameha*, Diabetes Mellitus, *Nidana*, *Mamejava Ghanavati*, Exercise.

Introduction

Prameha which is said to be a *Santarapanajanya* vyadhi (1). *Prameha* literary means increase quantity of urine with turbidity in it(2). Complete aversion towards physical exercise, Excessive sleeping during day and night, sedentary lifestyle are causative factors for *prameha*(3). All three *dosha* are involved in the pathogenesis of *prameha* but *Bahudrava shleshma* is predominant in this disease(4). With this 10 *dusyas* are also present which are Meda, mamsa, shukra, kleda, Shkra, Shonit, Vasa, Majja, Lasika, Rasa, Ojas (5).

Acharya charaka in *chikitsasthana* have mentioned that sedentary lifestyle, excess sleep, curds, soup of the meat of domesticated and aquatic animals and animals inhabiting marshy land, milk and its preparations, freshly harvested food articles, freshly prepared drinks, preparations of jaggery and all *Kapha* aggravating factors are responsible for the causation of *prameha*(6). It is classified into three types *kaphaja pittaja* and *vataja* which is subdivided into 10,6,4 respectively(7). Aggravated *kapha* vitiates *medas*, *mamsa* and *kleda* of the body located in *basti* (bladder and urinary system) and causes different types

of *kapha* dominant *meha*. Similarly, *pitta* aggravated by hot things vitiates those elements and causes different types of *pitta*, dominant *meha*. When other two *doshas* are in a relatively diminished state, the aggravated *vata* draws tissues elements (viz. *ojas*, *majja* and *lasika*) into the urinary tract and vitiates them to cause *vata* dominant *pramehas*.(8) Different *doshas* having entered the urinary tract in vitiated condition give rise to the respective types of *meha* with their own dominance.(9) Based on treatment it is classified into *sthoala pramehi* which is should be treated with *apatarpana chikitsa* and *krusha pramehi* which should be treated with *santarapana chikitsa*.(10)

Clinical features of *prameha* correlates with diabetes mellitus. Diabetes mellitus contributes significant burden to the global population as it is leading cause of morbidity and mortality worldwide. It is chronic, metabolic disease characterized by elevated levels of blood glucose which leads to serious damage to the heart, blood vessel, eyes, kidneys, nerves. Most common type observed among all the patients of DM is type 2. (11) Cases and the prevalence of diabetes have been steadily increasing over the past few decades. About 422 million people worldwide have diabetes, majority of them living in low-and middle-income countries and 1.6 million deaths are directly attributed to diabetes each year. (12) According to WHO Diabetes Mellitus is a heterogenous metabolic disorder characterized by a common feature of hyperglycaemia with disturbance of carbohydrate, fat and protein metabolism (13).

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Case study : PRAMEHA

Pradhana Vedana

Patient complains of increase frequency of micturition with excessive hunger, since 6 months.

Vedana Vruttanta

A 67 year old patient diagnosed to have diabetes mellitus since 8 years complains of with increased frequency in micturition during day (7-8 times) and night time (4-5 time) since 6 months consulted physician at Khemdas Ayurved Hospital.

Since 8 years patient was on tab Sugarmet MC 500mg 1-0-0 and wants to take ayurvedic anti-diabetic medications

Purva vedana vruttanta

Patient had suffered from BPH before 10 years and get relieved successfully with exercises

Kula vyadhi Vruttanta

Mother was said to be diabetic

Vyakthika vruttanta

Table No. 1 Table showing Ahara, Vihara and Masika Nidana

Ahara	Vihara	Mansika
Vegetarian	Sleep disturbed	Chintya
Madhur, snigdha,	Sedentary lifestyle	
Irregular meal time	Bowel – 1 time/day	
	Micturition – 6-7 times in a day and 5-6 times in a night	

Samanya pariksha

- Appearance – Fair
- Pulse rate -75/min
- B.P. -130/90 mm hg
- R.R. – 17/ min
- Weight- 172 cm
- Height- 78 kg
- Temperature – Afebrile
- R.S. – Bilateral Air entry clear
- C.V.S. – S1S2 heard, no abnormal Murmur heard
- C.N.S. – conscious and oriented

Rogi Pariksha

- Prakruti: PittaKapha
- Sara: Madhyama
- Satva: Madhyama
- Samhanana: Madhyama
- Kostha: Krura
- Agni: Vishama
- Pramana: Madhyama
- Aharashkti: Madhyama
- Jaranashakti: Madhyama
- Vyayamashakti: Madhyama
- Vaya: Vruddha
- Jihwa: Saama

Ashtavidha pariksha

- Nadi : Vata Kapha
- Mutra: 6-7 times (day), 5-6 times(night)
- Mala : 1 time/day

- Jihwa : Saama
- Shabda : Spashta
- Sparsha Samshittoshna
- Druka: Prakruta
- Akruti : Madhyama

Table No.2 Table Showing Investigations done before and after the treatment

INVESTIGATION	BEFORE TREATMENT DATE- 10/08/21	AFTER TREATMENT DATE- 14/09/21
HAEMATOLOGICAL		
Hb	13.7 gm%	13.7 gm%
TC	8700 cu/mm	8700 cu/mm
DC	68/25/04/03	68/25/04/03
Platelet count	273000	273000
RBC	4.57 million/micro	4.57 million/micro
Hba ₁ C	7.20	6.80%
URINE ROUTINE:		
PH	6.0	6.0
Specific Gravity	1.015	1.015
Blood	--	--
Protein	--	--
URINE MICRO		
Pus	2-4/hpf	2-4/hpf
Epi.-	1-2/hpf	1-2/hpf
RBC	--	--
Cast	--	--
Crystal	--	--
BIOCHEMISTRY		
FBS-	160 mg/dl	116 mg/dl
PP2BS-	200 mg/dl	156 mg/dl
LIVER FUNCTION TEST		
Total Bilirubin	0.9 mg/dl	0.9 mg/dl
Direct Bilirubin	0.3 mg/dl	0.3 mg/dl
Indirect Bilirubin	0.60 mg/dl	0.60 mg/dl
SGPT(ALT)	37 u/l	37u/l
SGOT	25 u/l	25 u/l
ALP	86	86
TOTAL PROTEIN:		
Total Protein:	6.80 gm/dl	6.80 gm/dl
S.Albumin:	4.70 gm/dl	4.70 gm/dl
S.A/G Ratio	2.24	2.24
LIPID PROFILE		
Total cholesterol (CHO-POD)	171 mg/dl	160 mg/dl
Triglyceride (GPO-POD)	129.0 mf/dl	117.0 mf/dl
HDL cholesterol (ENZYMATIC)	51.0 mg/dl	51.0 mg/dl
VLDL – cholesterol (Immuniinhibition/ Mod.IFCC Method)	25.80 mg/dl	25.80 mg/dl

LDL cholesterol (calculated By Friedwald formula)	94.20 mg/dl	94.20 mg/dl
Cholesterol/HDL Ratio (calculated)	3.35 mg/dl	3.35 mg/dl
LDL/HDL Ratio (Calculated)	1.85 mg/dl	1.85 mg/dl
RENAL FUNCTION TEST	BEFORE TREATMENT	AFTER TREATMENT
S. Creatine	1.20 mg/dl	1.20 mg/dl
Blood urea	14 mg/dl	14mg/dl
THYROID	BEFORE TREATMENT	AFTER TREATMENT
T3	1.22 ng/dl	1.22 ng/dl
T4	6.756 ug/dl	6.756 ug/dl
TSH	1.170 uIU/mL	1.170 uIU/mL
Cystatin-C	0.9	0.9

- Oil- *Atasi* and *Sharshapa*(Mustard)
- *Spices* – *Maricha*, *Saidhava*(Rock salt), *Hingu*(asafoetida), *Haridra*(Turmeric), *Ardra*(Ginger)

Results

Exercise and strict diet was advised to the patient with *Mamejaka Ghanavati*. Before taking Ayurvedic Medicines patient was on Metformin 500 mg OD but as he continued with Ayurvedic Medication patient has been withdrawn from the Modern medicine with controlled blood sugar level.

As patient's symptoms were reduced with controlled blood sugar level without Metformin 500 mg patient was willing to take *Mamejaka Ghanavati* instead of Allopathic Medicine and continue with Ayurvedic treatment. Patient was Insisted for regular follow up to Monitor Blood Sugar level.

Discussion

Prameha Nidana is of two type – *Sahaja*(Hereditary) and *Apathya Nimitaja*(Acquired). *Apathya nimitaja* can be further divided into *Aharaja Nidana*, and *Viharaja Nidana*. *Aharaja Nidana* Includes excess use of new peas, black gram and other pulses prepared in *Ghritha*, *Guda* and *Ikshu* preparation, milk fresh wine and curd preparation, meat soup of different *Anupa* animals etc. All *Aharaja Nidana* are *Kapha* and *Medo vardhaka*. *Vihara* excessive sleep, lack of exercise, worry, grief and anxiety are said to be the causative factors of *Prameha*.(14)

In this case study etiological factor were found to be to be intake of *Madhura*, *Snigdha Ahara*, Irregular meal time, Disturb sleep during night, sedentary lifestyle, *Chintya*. Assessment of etiological factors is first step to prevent the disease from occurring. After the assessment of etiological factors patient was advised to avoid *Nidana* and take strict diet according to *Ayurveda*. Diet mainly included avoiding of *Madhura*, *Snigdha Ahara* and including fiber rich green vegetables and cereals. *Yava* (*Barley*) is high in fiber content and highly recommended in *Prameha*. Comparatively whole green gram, Bengal gram have more fiber content than green dal and Bengal gram dal. Whole Horse gram dal and Toor dal also have rich fiber content . Fruits, Vegetables and spices are micronutrient rich. Vegetables and fibers reduces diabetes, delay sugar digestion and absorption. (15)

Mamejaka ghanavati

The internal Medicine used in this study is therapeutically indicated in *Prameha*. It has *Tikta Rasa*, *Laghu Guna*, *Ushna Veerya*, *Katu Vipak* and subsides *Kapha* and *Pitta*. *Mamejaka* is said to have anti-diabetic and anti-oxidant property. Medicine contains *Mamejaka* extract (8 Parts), *Mamejaka churna* (2 parts), *Pippali*(Piper longum 2 parts), and *Ativisha*(Aconitum heterophyllum, 2 parts). *Mamejaka ghanavati* has explained in *Bheshaja Samhita* under *Gutika* and *Guggulu Kalpa*.(16)

Centre of study: Parul Institute of Ayurveda and Research Hospital OPD, Vadodara,
Simple random single case study

Subjective criteria

Table No.3 Showing Subjective criteria

Symptoms	Before Treatment	After Treatment
Frequent Urination	6-7 times (day), 5-6 times(night)	4-5 times/day 1-2 times/day
Excessive Thirstiness	Present	Reduced
Excessive Hungry	Present	Reduced
Tiredness	Present	Reduced

Objective criteria

Table No.4 Showing Objective criteria

Investigations	Before Treatment	After Treatment
FBS	160 mg/dl	116 mg/dl
PP2BS	200 mg/dl	156 mg/dl
HbA ₁ C	7.20	6.80%

Diagnosis: *Prameha*

Internal Medicine Given

- *Mamejaka Ghanavati* 2 BD before food with lukewarm water was given for 30 days
- Along with above medicine patient was advised to walk 2 km daily with strict diet.
- With these patients was advised for regular monitoring of Blood Sugar Level
- Patient was advised to avoid the diet and lifestyle related to etiological factors of *Prameha vyadhi*. Proper guidelines of *Ahar Vidhi Vidhan* was advised like *Prakriti*, *Karan*, *Samyoga*, *Rashi*, *Desh*, *Kala*. With this following diet were advised.
 - Grains like *Yava*(barley), *Godhuma*(Wheat), *Bajara*.
 - Pulses – *Chanaka*(Bengal gram), *Adhaki*(Toor daal), *Mudga* (Green gram), *Kulathha*(Horse gram),
 - Vegetables – *Methika* (Fenugreek), *Patola* Pointed gourd), *Karvellaka*(Bitter gourd), *rasona*(Garlic)
 - Fruits- *Jambu*(Jamun), *Amalaki*(Goose berry), *Dadima* (pomegranate)

Acharya Sushruta have recommended walking of 100 *Yojana* in 100 days i.e, 1 *Yojana* per day. A study reported that a daily brisk walk of 7.5 km for 100 days can reverse Glucose Tolerance test to normal. Lack of exercise may be one of the main factor for causing *Prameha* thus risk can be reduced by regular exercises. (17)

Conclusion

This study shows successful management of *Prameha* with *Pramehahara Audhadha*, strict diet control and regular exercise. Patient was presented with poor control of type 2 diabetes mellitus with allopathic medicine with FBS level was 160 mg/dl and PP2BS was 200 mg/dl. After prescribing *Pramehara Aushadha*, strict diet and regular walking of 2 km. after one month of treatment sugar level found to be under control. FBS level 116 mg/dl PP2BS 156 mg/dl. So this single case study concludes that *Mamejaka Ghanavati*, strict diet and regular exercise can be effective in the management of *Prameha*.

References

1. Vidhyadhara Shukla, Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.317p
2. Waghe. Textbook of Roga Nidana & Vikriti Vigyana;First Edition;Nagpur;Rashtra Gaurav Publication;2019.204p
3. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.167p
4. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.503p
5. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition, Varanasi;Chaukhambha Sanskrit Pratishtan;2006.167p
6. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition, Varanasi;Chaukhambha Sanskrit Pratishtan;2006.169p
7. Bramhanand Tripathi.Madhav Nidana of Acharya Madhava. Varanasi;Chaukhambha Surbharati Pratishtana;2011.4p
8. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka. Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.168p
9. Bramhanand Tripathi.Madhav Nidana of Acharya Madhava. Varanasi;Chaukhambha Surbharati Pratishtana;2011.4p
10. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.170p
11. Harsha Mohan. Textbook of Pathology. 6th edition. New Delhi. Jaypee brother Medical Publisher privet limited;2010.819p
12. <https://www.who.int/westernpacific/health-topics/diabetes#1> dated 10-12-2021 time 16:24 IST
13. Harsha Mohan. Textbook of Pathology. 6th edition. New Delhi. Jaypee brother Medical Publisher privet limited;2010.818p
14. Vidhyadhara Shukla.Ravidatta Tripathi. Charaka Samhita of Acharya Charaka Reprint edition. Varanasi;Chaukhambha Sanskrit Pratishtan;2006.319p
15. https://www.researchgate.net/publication/273303484_Diet_and_Lifestyle_Guidelines_for_Diabetes_Evidenece_Based_Ayurvedic_Perspective dated 10-12-2021 time 16:26 IST
16. http://www.clinicaltd.com/Efficacy_of_Mamajaka_ghanavati_in_the_treatment_of_type_2_diabetes_mellitus:a_prospective_open_label_multi-centered_clinical_study dated 10-12-2021 time 16:38 IST
17. https://www.researchgate.net/publication/273303484_Diet_and_Lifestyle_Guidelines_for_Diabetes_Evidenece_Based_Ayurvedic_Perspective dated 10-12-2021 time 16:47 IST.
