



ISSN (E): 2277- 7695
ISSN (P): 2349-8242
NAAS Rating: 5.03
TPI 2020; 9(10): 548-551
© 2020 TPI
www.thepharmajournal.com
Received: 05-08-2020
Accepted: 10-09-2020

Dr. Ruchi Tyagi
M.D. Scholar, Department of
Physiology, VYDAMV, Khurja
Bulandshahr, Uttar Pradesh,
India

Dr. Chitranshu Saxena
Department of
Agadtantra, Vivek college of
ayurvedic sciences & Hospital,
Bijnor, Uttar Pradesh, India

Dr. OP Tiwari
Professor and Head, Department
of Physiology, VYDAMV,
Khurja Bulandshahr, Uttar
Pradesh, India

Corresponding Author:
Dr. Ruchi Tyagi
M.D. Scholar, Department of
Physiology, VYDAMV, Khurja
Bulandshahr, Uttar Pradesh,
India

A clinical study and role of Dehik prakriti on rate of occurrence of Madhumeha W.S.R. to diabetes mellitus (Type-2)

Dr. Ruchi Tyagi, Dr. Chitranshu Saxena and Dr. OP Tiwari

Abstract

Prakriti which is manifested in the intra uterine life and it is said to be unchangeable throughout life. *Prakriti* of each person determines the response differently when exposed to the same type of disease. With this aim that *Ayurveda* theory of *Prakriti* in light of modern science will establish a direct link in prevalence of Diabetes Mellitus (*Madhumeha*). For the clinical study 90 patients were randomly selected irrespective of age, sex, caste, religion, occupation etc. *Prakriti* assessment was done and in conclusion it was found that 48.9% patients were having *Vata Kaphaj Prakriti*, 28.9% patients were having *Kapha Pitta Prakriti* and 22.2% Patients were having *Vata Pitta Prakriti*. The highest percentage of *Vata Kapha Prakriti* indicates that patients with this type of *Prakriti* are most prone to develop *Madhumeha* disease.

Keywords: *Prakriti, Vata, Pitta, Kapha, Madhumeha, diabetes mellitus*

Introduction

Prakriti which is manifested in the intra uterine life according to the genetic (*Beeja*) and *Dosha* (body humours viz. *Vata, Pitta* and *Kapha*) influence and is said to be unchangeable throughout life. The *Prakriti* of a person tells about the physiological strengths and weaknesses, mental tendencies, and susceptibility to illnesses of various types of an individual. *Prakriti* (*Ayurvedic* constitution) is a sum total of the morphological, physiological and psychological basic traits, which is related to certain physical and mental tendencies that determine susceptibility to diseases. *Prakriti* of each person determines the response differently when exposed to the same type of disease. The ancient *Ayurvedic* classics texts namely the *Samhitas* of *Charak, Sushruta* and *Vagbhata* and the subsequent treatises have invariably given detailed description of the disease, its causes, types, pathology and the line of management and treatment both preventive and curative. In this at most time of need, this study was planned to evaluate the relation between *Prakriti* and Diabetes Mellitus (*Madhumeha*), with a aim that *Ayurveda* theory of *Prakriti* in light of modern science will establish a direct link in prevalence of Diabetes Mellitus (*Madhumeha*). This in turn will reduce incidence of Diabetes Mellitus (*Madhumeha*) by predetermining the susceptibility factors of Diabetes Mellitus (*Madhumeha*) incidence by *Prakriti*.

Methods

The complete work is been performed in the hospital of Vaidya yagya Dutt Sharma Ayurved Mahavidyalaya in the department of Kaya Chikitsa.

Selection of Cases

For the clinical study patients are randomly selected irrespective of age, sex, caste, religion, occupation etc. *Prakriti* assessment was done also irrespective of sex, occupation and socioeconomic reflection and all the patients registered on clinical basis in the OPD of *Kaya Chikitsa* from 11-10-2018 till 31-12-2018 of the college. The known cases of Diabetes mellitus patients were also selected for the study after confirming by various investigations.

Inclusion criteria

- Patients of age group 20-80 years.
- Patients with sign and symptoms of *Madhumeha*.
- Patients with confirmatory diagnosis as per modern view is been established.

Exclusion criteria

- Patients of other age groups.

- Patients with other complications with or without *Madhumeha*.
- Patients outside the OPD of the college.

Study design

- Study was carried out in total of 90 patients.
- The diagnosis criteria was as per the signs and symptoms described in *Samhitas*.
- Standard parameters Performa was prepared as per *Ayurvedic* and modern parameters for the diagnosis of *Madhumeha*.
- After confirmation of final diagnosis of *Madhumeha* their *Prakriti* was analyzed.
- A detailed performs specially prepared for this purpose was filled. The selected patients were given the *Prakriti* analysis chart to fill.

Prakriti evaluation is necessary tool of our study

Prakriti evaluation is designed on the basis of the elucidation found in *Charak Samhita*, which in turn, is based on the specific characteristics of a particular *Dosha* (Ca.Vi.8/96-98). In this context, *Charak* has explained the particular features of a particular *Dosha* and the specific characteristics produced in an individual. Thus, *Vata* has eight (8), *Pitta* has five (5) and *Kapha* has twelve (12) *Gunas* in total. Further, each *Gunas* is responsible for producing one or more traits/characters. Thus,

three *Gunas* possess neither equal number of *Gunas* nor do they produce equal number of characters / traits in the individuals.

Result

Table 1: Male to female ratio

Gender	n(%)	Vata Pitta	Kapha Pitta	Vata Kapha
Male	49	7	14	28
Female	41	13	12	16

Table 2: According to age group incidence of *Prakriti*

AGE Group	n(%)	Vata Pitta	Kapha Pitta	Vata Kapha
20-40	27	9	7	11
41-60	48	7	14	27
61 -80	15	4	5	6

Table 3 According to family history incidence of *Madhumeha*

Group	n(%)	Vata Pitta	Kapha Pitta	Vata Kapha
Maternal	31	8	10	13
Paternal	59	12	16	31

Table 4: Fbslevel of All 90 Patients

FBS Level (mg/dl)*	Vata Pitta	Kapha Pitta	Vata Kapha
	155.6±14.87	154.38±17.81	165.81±18.76

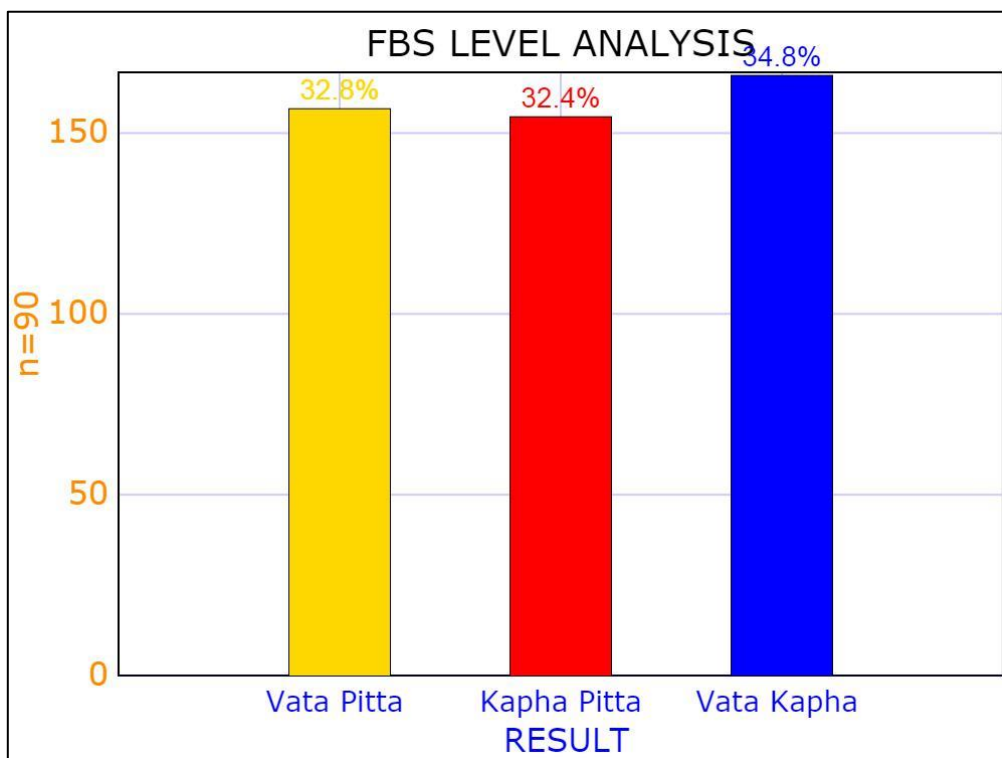


Fig 1: FBS Level Analysis

Table 5: P.P.B.S. Level of All 90 Patients

PPBS Level (mg/dl)*	Vata Pitta	Kapha Pitta	Vata Kapha
	253.55±57.18	241.76±44.07	306.02±46.89

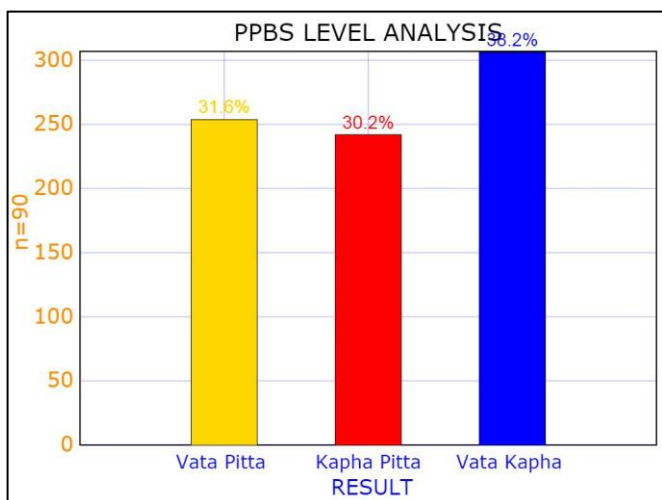


Fig 2: PPBS level analysis

Discussion

Discussion is the churning process done to obtain a reasonable and logical conclusion. This part contains discussion covering different topics in this study. The discussion over salient features of each part of the study is as follows:

Prakriti Review

Prakriti which is determined at the time of conception and remain unaltered during the whole life time, with contributions from environmental factors which including maternal diet and lifestyle etc. Every individual can be categorized into 7 combinations of *Prakriti* depending upon the predominance of *Dosha* and is this combination is independent of race, ethnicity, language, and geography, which will be specific for each individual. The susceptibility to different diseases depends upon the type of *Prakriti* constitution of an individual. Therefore, assessment of *Prakriti* analysis will not only help in understanding the physical and mental constitution of patient, but also plays a vital role in prognosis, diagnosis, treatment, and prevention of many complex diseases.

Clinical Discussion

Observations: The observations made on 90 patients of *Madhumeha* are discussed below:

Sex: In this study, maximum number of patients i.e. 54.44% were males and 45.55% were females. Nothing specific can be drawn from this observation as this could be due to the demographic facts or due to small sample.

Age: In the present study, total number of patients were 90 out of which 53.33% were from the age group of 41 to 60 years followed by 30% of patients in the age group of 20 to 40 years and 16.66% patients were in the age group of 61-80 years. It reveals that the 70% of the individuals are more affected by Type 2 diabetes after forties. The reason for this may be that environmental factors like stress, changing food habits & changing life style are common in this age group. These environmental factors act as predisposing factors in the manifestation of Diabetes mellitus. According to *Ayurveda* also, as the age increases *Vata* gets aggravated. So in *Vridhdhavastha* Vitiation of *Vata* leads to vitiation of *Agni* leading to metabolic disorder *Madhumeha* i.e. Diabetes mellitus.

Family History: 65.55% of the patients confirmed the family history of *Madhumeha*. It suggests that Type II DM has a strong genetic component.

Biochemical Values

Blood Sugar Level: The mean fasting Blood Sugar level was 165.81 mg/dl in *Vata Kaphaj Prakriti* patients while in *Vata Pittaj Prakriti* patients it was 155.6 mg/dl and in *Kapha Pitta Prakriti* patients it was 154.38 mg/dl. The mean Postprandial Blood Sugar level was 306.02 mg/dl in *Vata Kaphaj Prakriti* patients while in *Vata Pittaj Prakriti* patients it was 253.55 mg/dl and in *Kapha Pitta Prakriti* patients it was 241.76 mg/dl. It is evident from these values that all the patients were well established cases of Diabetes mellitus. Data also suggests that patient were having poor diet control and improper medication.

Summary and Conclusion

Summary or Conclusion in a nutshell is the essence of any study. A scientific discussion on the study gives rise to some fruitful conclusions. Conclusions drawn after the data was collected on the basis of inclusion and an exclusion criterion of the patients, this thesis comes to a conclusion from the present study are as follows:

- Patients having *Vata Kaphaj Prakriti* are more predominate to suffer from *Madhumeha*.
- Out of total 90 Patients 44 patients *Vata Kaphaj Prakriti* was found, 26 Patients of *Kapha Pittaj Prakriti* and 20 patients of *Vata Pittaj Prakriti* was found.
- Also FBS and PPBS level of *Vata Kaphaj Prakriti* patients was highest noted 165.81 ± 18.76 & 306.02 ± 46.89 respectively, indicating that pathogenesis and the treatment modalities are quite opposite to *Dosha* and *Dushya* resulting into more complication and less treatment opportunities, hence very poor prognosis of *Madhumeha*.
- FBS and PPBS level of *Kapha Pittaj Prakriti* occupies lowest position 154.38 ± 17.81 and 241.76 ± 44.07 respectively, indicating that due to involvement of *Aam* these levels are high.
- Vata Pittaj Prakriti* patients FBS and PPBS level occupies intermediate position 155.6 ± 14.87 and 253.55 ± 57.18 respectively due to involvement of *Vata*.
- Madhumeha* (Type II Diabetes mellitus) mostly affects the individuals after the age of forty years in the age group of 41-60 years.
- The present study suggests that Type II DM has got a strong genetic component. It also reveals the chronic nature of the disease.
- The study confirms the dominancy of *Kapha Dosha*, *Meda Dhatu Dusti*, *Rasavaha* and *Medovaha Srotodushti* in the pathogenesis of *Madhumeha*.
- Changing life styles e.g.; sedentary life, increased stress, strain may contribute in the establishment of the disease. Tendency towards sedentary life style and faulty dietary habits, leads to vitiation of *Kapha* and *Meda* leading to *Madhumeha*.
- It can be concluded that on the basis of symptoms study of *Madhumeha*, the disease *Madhumeha* can be correlated with Diabetes mellitus - Type II
- The present study was carried on small sample for a limited time and it showed encouraging results. However to be more confirmative further study should be conducted on large sample for longer duration.

Result

On the above observation it was found that 48.9% patients were having *Vata Kaphaj Prakriti*, 28.9% patients were having *Kapha Pitta Prakriti* and 22.2% Patients were having *Vata Pitta Prakriti*. The highest percentage of *Vata Kapha Prakriti* indicates that patients with this type of *Prakriti* are most prone to develop *Madhumeha* disease.

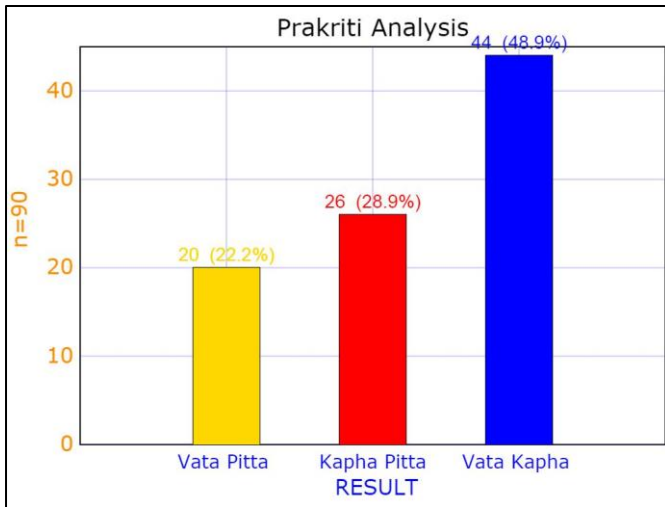


Fig 3: Prakriti analysis

References

1. Joshi YG, Charak Samhita commentry, Chakrapanidatta virachit Ayurved Dipika Vyakhya, Marathi translation and with yashavant tika,1st part Vimansthana, chapter 1st edition, pune; vaidyamitra publications 2003;8:95.
2. Joshi YG, Charak Samhita, Chakrapanidatta virachit Ayurved Dipika Vyakhya, Marathi translation and with yashavant tika,1st part Vimansthana, chapter 1st edition pune; vaidyamitra publications 2003;8:95.
3. Anant Damodar Aathavale, editor, ashtang sangraha, sharirasthan, edition, pune; atrey publications, 1980,8.
4. Sharma PV, Charaka Samhita. sutrasthan, chapter 6th edition, New Delhi; Chaukhamba Orientalia 2000;7:39-40,
5. Kaviraj Shri, Nagendra Sengupta, Kaviraj Shri Balchandra, Sengupta. editor, commentary; Ayurved Dipika Commentaries of Chakrapanidatta and Jalpakalpataru commentary of Gangadharsen of charaka samhita,1st part. 2nd edition, New Delhi; Chaukhamba publication 2002;7:41.
6. Bhaskar Govind Ghanekar, Sushrut Samhita. sharirasthanam, with Ayurved Rahasya Dipika vyakhya, Meherchand,13th edition, Meherchand Lachmandas publications, 1998, 4.
7. Joshi YG, Charak Samhita. Marathi translation and with yashavant tika,1st Part, sutrasthan, 1st edition, pune; vaidyamitra publications 2003;7:39-401.
8. Yadavji Trikamji Acharya. editor, Sushrut Samhita of Sushruta comentry; Nibandna Commentary by Dalhanacharya sharirsthana chapter 1994; Chaukhamba Surbharati Prakashan 1994;4:63.
9. Bhaskar govind Ghanekar, Sushrut Samhita, sharirasthanam, with Ayurved Rahasya Dipika vyakhya, verse 13th edition, Meherchand Lachmandas publications 1998;63:4.
10. Sharma PV, Charaka Samhita, Sutrasthan, 6th edition, New Delhi; Chaukhamba orientalia 2000;28:4.