

The Study of effect of Nisha Amalaki Yoga in Madhumeha

Dr. Rohit C.Patil,

MD(Swasthavritta),

Reader,Swasthavritta Dept.

Late B.V.Kale Ayurved College,Latur

Introduction -

Madhumeha,as described in the samhitas of Ayurveda comes under Prameha.Out of the 20 types of Prameha,Madhumeha comes under Vataja Prameha.As per modern Science,it is named as Diabetes.

The Prevalence of Diabetes is on the rise.The World Health Organisation (WHO) estimates 32 million People with Diabetes in India in 2000,the number is projected to rise 80 million by the year 2032.

India on the way to become the Diabetes Capital of the World.

Today the mankind is living in an era of evolutionary explosion with greatest stress and strain than any time in the past.Technical and economic developments has totally changed Lifestyle.

Stress and Strain leads to a large number of diseases including Diabetes Mellitus.Stress of situations causes excess of circulating hormones(Glucagon) which leads to inappropriate elevation of blood glucose.

Sedentary lifestyle appears to be an important risk factor for the development of Diabetes Mellitus.The major symptom of Diabetes is Hyperglycaemia,i.e. increased in glucose level manifested in blood and urine examination.

Diabetes is characterised by chronic hyperglycaemia with disturbances of carbohydrate,fat and protein metabolism resulting from defects in Insulin secretion,action or both.

In modern medicines,drugs such as sulphonyl ureas and Biguanides are generally used but Insulin still remains the major drug.But all these modern medicines have the adverse effects of hypersensitivity to a drug,sudden hypoglycaemia and so on.

As per ayurvedic pathology/samprapti, the kapha dosha in basti vitiates meda,mamsa and kleda and leads to Prameha.Similarly,Pitta and Vata doshas takes role in the samprapti of Prameha/Madhumeha.

As the disease is on the rise and madhumeha leads to a large number of complications,hence we had selected this subject so that a simple and economical remedy can be made available.A drug that must be used should check the pathology and not only reduce the blood glucose level.Allopathic medicines are attributed towards the latter only.Treatment of Madhumeha using Ayurvedic medicine was studied under this Topic.

Aims and Objectives –

To study the effect of Nisha Amalaki yoga in Madhumeha.

Methods and Materials-

- a)Patients having Diabetes were selected for the study.
- b)Diagnosis was based on clinical features and investigations.
- c)Groups-
All the selected patients were divided in to the following groups as under for the study...
GROUP 1 – 20 patients were selected and Nisha Amalaki yoga was given along with allopathic Rx.
GROUP 2 – 20 patients were selected and was given allopathic treatment only.
- d)Response of treatment was assessed by studying the following symptoms of Madhumeha.
 - 1.BSL –both fasting and post prandial
 - 2.Urine sugar level
 - 3.Polyuria
 - 4.Polydipsia
 - 5.Polyphagia
 - 6.Daha
 - Numbness
- e) Criteria for exclusion of patients-

Patients below 20 and above 70 years of age.
Diabetes with secondary complications.

Drug discussion –

The stages where one should expect Ayurvedic medicines to be effective are –

- newly diagnosed mild to moderate Diabetes
- Non Insulin dependent Diabetes
- Obese Diabetes
- Uncomplicated Diabetes

This study was undertaken to see the effectiveness of two Ayurvedic drugs in the management of Madhumeha.

1.Nisha means Curcuma Longa.

2.Amalaki means Emblica Officinalis.

All the Pioneers of Ayurveda has described the use of Nisha Amalaki in the management of Prameha or Madhumeha.

मेहेषु धात्रीनिशे

वा.ऊ.४०/४८

Here Vagbhat has mentioned Nisha Amalaki as the Agrya Dravya in the management of Madhumeha in THE 40th Chapter of Uttarasthana.Agrya dravyas are those drugs which are considered as sure beneficial drugs.

हरिद्रा पिबेद रासेनामलकी फलानाम

च.चि.६/२६

Acharya Charak has also mentioned the use of NishaAmalaki in the treatment of Madhumeha.He advocates the use of Haridra Churna along with the swaras of Amalaki fruit.

तत्रशुद्धदेह आमलक रसेन हरिद्रां मधुसंयुक्ता पाययेत्

सु.चि.११/८

Sushrut states the use of Haridra along with madhu mixed with the juice of Amalaki in Madhumeha.

सर्वामेहः हरो धात्र्या रसः क्षौद्रनिशायुतः

भैषज्य रत्नावली

Bhaishajya Ratnawali also has the reference.Nisha mixed with honey along with the swaras of Amalaki is beneficial for the cure of all types of Prameha.

Curcuma longa extract showed blood glucose lowering activity in experimentally diabetes induced

rats.Amalakai is an Antioxidant and its role in Prevention of Polyol accumulation by inhibiting Aldose reductase to prevent Diabetes complications has received considerable attention.

Observations-

5 gms.fine powder of Nisha was mixed with freshly prepared 10 ml Amalaki swaras and was given to the Patients in twice daily doses,.i.e. in the morning and evening before major meals.The Treatment was givenfor a total of 60 days.Assesment of the patients status was done by performin laboratory investigations at a 20 days interval each and also otherobservations noted.

Assesment of variables –

Grading for the severity of each symptom was framed asfour point scale(0-3).The severity for each variable was graded as –

0-Normal

1-Mild

2-Moderate

3- Severe

***Table 1 – Distribution of 40 madhumeha patients according to Sex.**

Sr.No	Sex	Group 1	Group 2	Percentage
1.	Male	14	11	25(62.5%)
2.	Female	06	09	15(37.5%)
	Total	20	20	100%

The study reveals that 62.5 % patients were males and 37.5 % were females.

Table 2- Distribution of 40 Madhumeha Patients according to age.

Sr.No	Age	Group 1	Group 2	Percentage
1	20-30 yrs	00	02	2(5%)
2	31-40 yrs	03	05	8(20%)
3	41-50yrs	08	07	15(37.5%)
4	51-60 yrs	04	05	9(22.5%)
5	61-70 yrs	05	01	6(15%)
	Total	20	20	

The study reveals that the maximum number of patients 37.5 % were found in the 41-50 yrs age group. It is clear that, Risk of madhumeha increases as age advances. as there is decreased in B cells of pancreas especially after 40 years of age.

Table 3- Distribution of Madhumeha Patients according to economic status

Sr.No	Economic status	Group 1	Group 2	Percentage
1	High	04	08	12(30%)
2	Middle	14	09	23(57.5%)
3.	Lower	02	03	05(12.5%)
	Total	20	20	100%

57.5 % of patients were in the middle class followed by the higher class.

Table 4 –Classification of 40 patients according to Education

Sr.No	Education	Group 1	Group 2	Percentage
1	Graduates	08	11	19(47.5%)
2	HSC	08	05	13(32.5%)
3	Primary	03	03	06(15%)
4	Uneducated	01	02	03(7.5%)
	Total	20	20	100%

It shows the incidence of Madhumeha is more in the well educated class about 47.5 %

Table 5 – Distribution of 40 patients according to Occupation –

Sr.No	Occupation	Group 1	Group 2	Percentage
1	Businessman	05	03	08(20%)
2	Govt.Servant	08	09	17(42.5%)
3	Farmer	02	03	05(12.5%)
4	Housewife	03	04	07(17.5%)
5	Labourer	01	01	02(5%)
6	Retired	01	00	01(2.5%)
	Total	20	20	100%

Study according to Occupation reveals that the incidence of Diabetes is more in Govt.Servants 42.5 % .

Table 6- Distribution of 40 patients according to Family History.

Sr.No	Family History	Group 1	Group 2	Percentage
1	Present	11	13	24(60%)
2	Absent	09	07	16(40%)
	Total	20	20	100%

There is much more evidence that Family History is strongly associated with the Disease.

Statistical Analysis-

Data was collected in the form of before and after treatment results of signs and symptoms of Madhumeha.

In the present study, Analysis is done on the role of Nisha Amalaki Yoga. The data obtained is Qualitative data as we have graded the signs and symptoms based on their severity.

For this Purpose, First of all we have to set the null hypothesis(H0) and alternative hypothesis (H1) as :-

H0 – There is no significant difference between the symptoms observed in patients of Madhumeha before and after treatment of Nisha Amalaki Yoga along with allopathic medicines, means Treatment is not effective.

H1- There is significant difference between the symptoms observed before and after treatment of Nisha Amalaki along with allopathic medicines, means Treatment is Effective.

To test the above hypothesis, Wilcoxon Signed Rank Test was used which is a non parametric test, following results were obtained...

From the observations, the significance value is 0.000 which is less than P value 0.10 at 5 % level of significance for two tailed which implies that null Hypothesis H0 is rejected at 5 % level of significance.

Thus we can conclude that the treatment Group 1(Nisha Amalaki Yoga along with allopathic medicines) is highly effective for all the assessed symptoms.

Discussion-

Criteria of assessment of results was done on the basis of gradation of various symptoms found in

Madhumeha and the study was conducted to see the effect of Nisha Amalaki Yoga on that symptoms in Madhumeha.

1.Urine Sugar Level –

Fasting urine sugar level was reduced in both the groups.Group 1 showed 86.27% reduction while Group 2 showed 67.34 % reduction.

While Post Prandial Urine Sugar Level showed 86.79 % relief in Group 1 as compared to 59.09 % in Group 2.

2.Blood Sugar Level –

Fasting Blood Sugar in Group 1 reduced by 78.94% as compared to 62.5 % in Group 2.

Post Prandial Blood Sugar IN Group 1 showed 78.94 % reduction as compared to 57.14 % in Group 2.

3.Polyuria –

87.23 % reduction in Group 1 to 61.53 % in Group 2.

4.Polydipsia-

Polydipsia score in Group 1 was relieved by 84.09 % while that score in another group by 62.23 %.

5.Polyphagia-

Group 1 – 80.43 % Group 2 – 60.87 %

6.Daha –

Group 1 – 82.40 % Group 2 68.8 % reduction

7.Numbness-

82.05 % reduction in Group 1 to 65.78 % in Group 2

8.Shaithilya-

82.35 % Reduction in Group 1 as compared to 61.22 % in Group 2.

9.Mukhashosha-

76.30 % score reduction in Group 1 to 48.64 % in Group 2.

10.Avil Mutrata-

80% in Group 1 as compared to 40 % in Group 2.

Total Effect Of Therapy-

Highest number of Patients 85 % in Group 1 while only 5 % in Group 2 showed markedly improvement..It is worthy to note that only 5 % of patients in Group 1 showed Poor response while 15 % patients showed poor response in Group 2 and 80 % showed improvement.

It is undoubtedly evident from the foregoing that ,Nisha Amalaki Yoga along with allopathic treatment bestowed better effect.Group 1 patients showed a significant reduction in total symptom score as compared to Group 2.

Thus these two drugs work to remove the agnimandya improving the Jatharagni and in turn the Dhatwagni.Thus the Root cause of Madhumeha is Prevented.

Conclusion-

From the Study, it can be concluded that ...

- 1.Nisha Amalaki Yoga is found to be effective in the management of Madhumeha.
- 2.Use of Nisha Amalaki Yoga along with the Allopathic medicines helps not only to reduce the symptoms but also to avoid the ill effects of allopathic medicines and improves the general condition of the Patient.
- 3.Nisha is a well known antioxidant while Amalaki is a Rasayana.Both helps to boost the immunity of patient prolonging his life.

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