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A COMPARATIVE STUDY ON MANAGEMENT OF AMAVATA W.S.R TO RHEUMATOID ARTHRITIS WITH RASONADI KWATHA AND MAHARASANADI KWATHA- A CLINICAL EVALUATION

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ABSTRACT

Amavata is a systemic disorder which tends to progress towards specific involvement of musculoskeletal system in due time. The disease displays many features in common with a collection of signs and symptoms that are typically diagnosed as Rheumatoid Arthritis (RA). Irregular food habits and unwholesomeness of the drugs and diets because of their mutually contradictory qualities and specific actions, which is commonly evident in the lifestyle behaviours of the present community, plays a major role in causality of Ama. This Ama is the chief factor involved in pathogenesis of Amavata, along with vitiated Vata dosha. The formulation Rasonadi Kwatha mentioned in Amavatadhikara of Bhaishajya Ratnavali was undertaken to re-establish its efficacy in managing Amavata. The formulation of Maha Rasanadi Kwatha mentioned in Amavatadhikara of Bhaishajya Ratnavali with reference of Bhavaprakasha.

KEYWORDS: Amavata, Rheumatoid Arthritis, Rasonadi Kwatha, Maha Rasana Kwatha.

INTRODUCTION

Pain relating to body or mind or both has been an obstacle in the pathway leading to happy life. Sometimes pain can be so severe as to disable the person, cripple and make him confined to bed. A disease is always a result of dosha vaishamya which manifests itself through derangement of Agni, Dhatu, Mala, Manas and Indriya in terms of Dravya and/or Guna and/or Karma. Vagbhata says, 'All the diseases of systemic origin have their base in Agnimandya. One among these is a serious agonizing painful condition called as Amavata, which has been leading man to misery and has also challenged the medical systems. Amavata

is a resultant combined effect of simultaneous aggravation of two pathological entities, Ama and Vata. Ama is a consequential toxic metabolite of Agnimandya. Vata dosha is vitiated by its etiological factors. Though an elaborate description of Ama and Vata has been made in the Brihatrayees, Amavata as an independent disease entity has been dealt in detail for the first time by Madhavakara in Madhava Nidana in 19th century A.D. Later authors have explained the disease and its line of management comprehensively. Amavata displays many features in common with a collection of signs and symptoms that are typically diagnosed as Rheumatoid Arthritis (RA). RA is one of the commonest debilitating diseases by virtue of its chronicity and complications. The incidence of RA is reported to be 1 to 1.5% of general population with female to male ratio of 3:1. In females before the age of 45 yrs the ratio is 6:1. Prevalence increases with age, with 5% of women and 2% of men over 55 yrs being affected.[1] Though there are 'n' numbers of formulations both in Ayurveda and contemporary medicine, there is still a need to come up with formulations which can be applied in specific vyadhyavastha to get best results. With this background, the present study was taken up to understand the efficacy of a classical combination Rasonadi kwatha and Maha Rasanadi Kwath, which is attributed with best Amavatahara property, taken from Amavata chikitsadhikara of Bhaishajya ratnavali and Athamvatrogadhikara of Bhaishajya ratnavali with reference of Bhavaprakasha respectively.

Methodology

Materials and Methods

This part dealt with the materials and methods of the research work carried out in the clinical study. Clinical study plays a very important role in evaluating efficacy, potency and mode of action etc. of a drug. A drug having high claim cannot be accepted without observing its practical efficacy. Without clinical trial on human subjects study of drug cannot be completed and drug cannot be included in routine therapeutics for general practice. To evaluate therapeutic effect of the trial drugs, clinical study was undertaken.

This was a comparative study wherein the efficacy of Rasonadi Kwatha is compared with the efficacy of Maha Rasanadi Kwatha in Janu Sandhi Shoola Shotha & Stabdata in Amavata.

Materials

- Literary Work
- Clinical Study
- Patient observed before and after treatment

Collection of Materials and Methods

1. Literary study

All the Ayurvedic classical literatures including Brihatrayi, Laghutrayi and the text books related to Dravyaguna vijnana will be reviewed for the study. Present time journals including websites and contemporary medical books also will be referred for the study.

a. Astanga Hridaya – Sutra-sthana, Chap. 13 Doshopakramaniya Adhyaya (Reference about Ama)
b. Susruta Samhitha _ Uttara tantra. Chap- 56, Visoochika Pratishedhiya Adhyaya
c. Madhava Nidana - Amavata Nidana Chap. 25
d. Bhavaprakasha - Amavata Chikitsa Prakarana Chap. 29
e. Indian Medicinal Plants, a compendium of 500 species
f. Ayurvedic Pharmacopeia of India
g. Davidson's Principles and practice of Medicine
h. Macleod's Clinical Examination
i. Harrison's Principles of Internal Medicine

Source of data

The patients attending OPD/ IPD of Desh Bhagat Ayurvedic College and Hospital who fulfilled all the inclusion criteria were randomly selected for the study.

Study design

Single blind clinical study

Aims and Objectives of the study

1. To assess the efficacy of Rasonadi Kwatha & Maha Rasanadi Kwatha in management of Amavata.
2. To carry comprehensive literary survey covering classical and contemporary aspects of Amavata.

Subjective parameters

1. Sandhi Shoola
2. Sandhi Shotha
3. Sandhi Stabdata
4. Angamarda

5. Degree of flexion
6. Local Temperature
7. Tenderness

Objective parameters

1. Hb%
2. CRP
3. ESR

DISCUSSION

Discussion is the most essential phase of any research work. Discussion improves the knowledge and discussion with science becomes base of the establishment of the concept. Keeping this in view, the facts which have emerged from the study can be studied in 2 main headings.

1) Discussion on Observations
2) Discussion on Results

Discussion on observation

The demographic data available from the observations made during the study are discussed here-

Age: In this study the upper age limit was restricted to 50 years with equal distribution of patients in all the age groups. Majority of the patients were 47.50% from the age group 31-40 showing the prevalence of this age. Patients were also found distributed in other age groups between 20-30 years i.e. 27.5% and 41-50 years i.e. 25% indicating the occurrence of this auto – immune disease in young age.

Sex: Female sex is a risk factor for RA. In this study majority of the patients, 77% were females, 22.5% were males, which supports the above statement.

Education: Majority of patients i.e. 62.5% were of primary education, 12.5% were illiterate and 25% were graduates.

Marital status: Majority of patients i.e. 62.5% were married and 37.5% were unmarried.

Socio-economic status: 17.5% of the patients were from Upper middle class, 40% from

Lower middle class and 35% from the poor class. This shows the socio- economic condition of the patients attending the OPD and IPD of this Hospital.

Chronicity: Majority of patients were 55% below 2 years, 27.50% below 1 year and 17.5% had Chronicity below 6 months.

Family history: Majority of patients did not have any family history, 20% of patients had family history.

Shareerika prakruti: Majority of the patients (27.5%) belonged to Kapha pitta prakruti. Then Vata pitta prakruti (25%), pittakapha prakruti (17.5%), Vata kapha prakruti (17.5%) and Kapha vata (12.5%).

Agni: In the present study, maximum numbers of patients 36.66% were having vishamagni, 20% subjects were of Mandagni, 26.66% were of tikshnagni and 16.66% were of samagni Agni has major role to play in disease Amavata as mandagni is a major cause for production of the ama.

Koshta: 57.5% patients had madhyama koshta, While 25% of the patients had krura koshta and 17.5% had Mridu koshta.

Ahara: 82.5% of the patients preferred mixed type of diet and 17.5% of the patients were vegetarians. This shows the food habit of the society & the prevalence of the disease in persons indulging in more spicy & hot foods.

Sara: Maximum number of patients 67.5% were of Avara Sara, 22.5% were pravara sara and the remaining 10% subjects were of Madhyama Sara.

Discussion on results

Subjective parameters

The present study was taken up with following Aims and Objectives

1. **Sandhi shoola:** The results within the group were assessed by using paired t test. The mean of Sandhi Shoola before treatment and after treatment in group A were 2.30 and 0.80 respectively and in group B it was 2.30 and 0.45 respectively. Sandhi Shoola was markedly reduced in patients of Rasonadi Kwatha (Group A) (t value-6.708 p value-0.001) and even in Maha Rasanadi Kwatha(Group B) (t value-9.454 p value-0.001).

Relief % in group A was 62.50 % and in Group B was 83.33%. Hence clinically, Group B patients shown better improvement in Sandhi Shoola.

2. **Sandhi shotha:** The mean of Sandhi Shotha before and after treatment in group A was 2.10 and 0.90 respectively and in group B it was 2.10 and 0.35 respectively. Sandhi Shotha was markedly reduced in both groups. Group A Rasonadi Kwatha (t value-10.258 p value-0.001) Group B Maha Rasanadi Kwatha (t value-80.596 p value-0.001). Relief % in group A was 60.00 % and in group B was 84.17 %. Hence clinically, Group B patients shown better improvement in reduction of Sandhi Shotha.

3. **Sandhi stabdata:** The mean of Sandhi Stabdata before and after treatment in group A was 2.55 and 1.20 respectively. And in group B it was 2.55 and 0.70 respectively. Sandhi Stabdata was markedly reduced in both groups. Group A (t value-12.337 p value-0.001) group B (t value-12.333 p value-0.001). Relief % in group A was 53.33 % and in group B was 74.17%. Hence clinically, Group B patients shown better improvement in reduction of Sandhi Stabdata.

4. **Angamarda:** The mean of Angamarda before and after treatment in group A 1.95 and 0.90 respectively. And in group B it was 1.95 and 0.45 respectively. Angamarda was markedly improved in both groups. Group A (t value-9.200 p value-0.001) Group B (t value-11.052 p value-0.001).Relief % in group A was 55.83% and in group B was 80.83%. Hence clinically, Group B patients had shown better improvement in Angamarda.

5. **Degree of flexion:** The mean of Degree of flexion before and after treatment in group A was 2.45 and 1.20 respectively and in group B it was 2.45 and 0.55 respectively. Degree of flexion was markedly reduced in both groups. Group A (t value-10.162 p value-0.001) Group B (t value-9.318 p value-0.001). Relief % in group A was 55.83% and in group B was 77.50%. Hence clinically, Group B patients had shown better improvement in reduction of Degree of flexion.

6. **Local temperature:** The mean of Local Temperature before and after treatment in group A was 2.25 and 1.10 respectively and in group B it was 2.25 and 0.40 respectively. Local Temperature was markedly reduced in both groups. Group A (t value-8.759 p value-0.001) Group B (t value-10.180 p value-0.001). Relief % in group A was 54.17% and in

group B was 82.50%. Hence clinically, Group B patients showed better improvement in reduction of Local Temperature.

7. **Tenderness:** The mean of Tenderness before and after treatment in group A was 2.50 and 1.05 respectively and in group B it was 2.50 and 0.60 respectively. Tenderness was markedly reduced in both groups. Group A (t value-10.722 p value-0.001) Group B (t value-10.782 p value-0.001). Relief % in group A was 59.17 % and in group B was 75.83 %. Hence clinically, Group B patients shown better improvement in reduction of Tenderness.

CONCLUSION

The conclusions drawn from the present clinical study are as follows

- Amavata an Auto-immune Arthritis found globally wherein the involvement of knee joints leads to disability of the sufferers in day to day activities hampering the quality of life.
- A part from the main line of treatment there is absolute necessity of a locally acting Bahirparimarjana Chikitsa to reduce the signs of inflammation & to improve the range of movements.
- Here a comparative study of 2 effective Bahiparimarjana Chikitsa along with deepana pachana being common in both groups was done & found to be effective.
- Both Rasonadi Kwatha & Maha Rasanadi Kwatha shown highly significant improvements in all parameters.
- In comparison, Maha Rasanadi Kwatha proved to be more effective in improvement of all the parameters.
- No complications were observed during the study.

Scope for future study

In the present study sample had been drawn from limited population. The similar study can be performed on larger population with larger sample size. If such study will be carried out on sample from a large population someone may get different and more unbiased results. There is further scope to carry out this study with different doses, Anupana in relation with Amritadi Vati and also comparative study with another drug may be carried out.

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(Dr. Deep Shikha)

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