



Research Article

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EFFICACY OF DASHAMOOOLA KWATHA & HAREETAKYADI CHURNA IN THE TREATMENT OF AMAVATA WITH SPECIAL REFERENCE TO RHEUMATOID ARTHRITIS

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ABSTRACT

The samprapti (etiopathogenesis) of almost all the diseases begin with the Agnimandya "Rogah sarveapi mande agnou" (All the diseases are due to diminished digestive ability). Agnimandya leads to the formation of Ama. One of the most challenging diseases caused by Ama is Amavata. Having several features similar to Rheumatoid arthritis, Amavata can be correlated with Rheumatoid arthritis (R.A.). Chakradatta has mentioned Dashamoola Kwatha & Hareetakyadi Choorna for the treatment of Amavata. Here an attempt is made to study the efficacy of these two formulations in the management of Amavata. Patients were divided into 2 groups, Group A & Group B with 20 patients in each group. Patients in group A were administered Dashamoola Kwatha 50ml per day in 3 divided doses and Hareetakyadi choorna 12 gm in three divided doses along with Pathya Ahara Vihara for 30 days. Patients in group B are placed only on Pathya Ahara and Vihara and kept as control group. Results showed that treatment given to patients of trial group A has more significance than treatment given to patients control group B, in terms of efficacy. It can be concluded that clinical response of Dashamoola Kwatha & Hareetakyadi Choorna is appreciably better in comparison to Pathya Ahara & Vihara.

Keywords: Amavata, Samprapti Vighatana, Dashamoola Kwatha, Hareetakyadi Choorna, Rheumatoid arthritis and Pathya Ahara & Vihara.

INTRODUCTION

Modern medical science has made astonishing progress particularly during the last 50 years. It cannot be denied that its achievements in the field of immunization, surgery etc. are path breaking. Yet modern medical science has miserably failed to achieve any significant breakthrough in several other fields, particularly metabolic diseases. Rheumatoid arthritis is also one such disorder which carries a crippling effect on the sufferer & has evaded a cure in spite of years of research. Rheumatoid arthritis in Ayurveda is denoted by the name Amavata and one of the cardinal symptoms is vrischikadamshtavatvedana¹, where the sufferer undergoes agonizing pain as if bitten by a scorpion. Ayurveda believes that ama that is formed as a result of diminished Agni² undergoes sthanasamshraya (localization) in the sandhis (joints) under the influence of vata and causes severe pain. Females have preponderance to males in the ratio of 3:1³. In India a rough estimate places the incidence of Rheumatoid Arthritis at 0.5-0.75% with 2/3rd of the patients suffering from mild to moderate disability. 10% of the patients progress to severe disability in about ten years time. Thus Rheumatoid Arthritis constitutes a challenging disease even today. There is no effective cure for this disorder except palliative, anti-inflammatory and analgesic medicines whose effect is temporary. Their long term use can produce toxic effects on different systems of the body.

Chakradatta mentioned Dashamoola Kwatha & Hareetakyadi Churna for the treatment of Amavata which is safe, nontoxic & effective⁴. Dashamoolas have Vedanasthapaka (analgesic) & Shothahara (anti-inflammatory) property. Hareetakyadi Churna

contains Shunthi which has Deepana (carminative) Pachana (digestive) Guna as well as Shoolashamaka (analgesic) Guna & Hareetaki has Rasyana (antioxidant) & Anulomana (laxative) Gunas. Even in modern science Anti-inflammatory action & Analgesic effect of Dashamoolas have been proved⁵. Anti-inflammatory effect of Shunthi by reducing prostaglandin synthesis & inhibiting leukotriene biosynthesis is scientifically proved⁶. *Terminalia chebula* is said to be a potent antioxidant⁷.

Aims & Objectives

To know the efficacy of Dashamoola Kwatha & Hareetakyadi Churna in the treatment of Amavata with special reference to Rheumatoid arthritis

MATERIALS & METHODS

Data were collected from patients attending OPD & IPD fulfilling the clinical criteria for diagnosis of Amavata with special reference to Rheumatoid Arthritis. Patients were randomly selected irrespective of their socioeconomic, educational & religious status. Ethical clearance Number GAMC/PGS/16/10-11 was granted for this study.

Inclusion criteria

Patients having classical features of Amavata like angamarda (bodyache), aruchi (tastelessness), gaurava (heavyness), thrishna (thirst), jwara (fever), shoola (pain), shotha (edema) etc were considered for the present study¹.

Patients between the age group of 18-60 years irrespective of sex, religion & occupation were selected for the study.

The criteria laid down by American Rheumatism Association (ARA) mentioned below were also taken into consideration.⁸

- Morning stiffness lasting for >1 hour
- Arthritis of 3 or more joints
- Arthritis of hand joints
- Symmetrical arthritis
- Presence of Rheumatoid nodules
- Presence of Rheumatoid factor
- Radiological changes

First 4 criteria had to be present for duration of 6 weeks or more, for inclusion in the study.

Exclusion criteria

- Age less than 18 years and more than 60 years
- Chronicity for more than 10 years and having joint deformities.
- Patients suffering from other systemic diseases, pregnant women and metabolic diseases like diabetes mellitus.

Investigations

- Hb%, TC, DC, ESR
- RA Factor
- Serum uric acid
- CRP for the severity of the disease

Criteria for diagnosis

Patients were diagnosed clinically on the basis of signs and symptoms and also through laboratory investigations as mentioned under inclusion criteria.

Assessment Criteria

It was done on the basis of following subjective & objective parameters. Conclusion was drawn on the basis of suitable statistical analysis.

Subjective

Joint Pain, Morning Stiffness, Angamarda, Aruchi, Jwara, Gaurava

Objective

Swelling of the joints, Tenderness, Warmth of the joints, Range of movements

Criteria for the total effect of the therapy

- Marked improvement - relief of >60%
- Moderate improvement - 40 to 60% relief
- Mild improvement - less than 40% of relief
- No Change - 0% relief

Scoring Criteria

0-Absent 1- Present. Scoring was given before & after the treatment.

Composition of the test drug⁹

Dashamoola Kwatha: Bilwa (*Aegle marmelos*), Agnimantha (*Premna integrifolia*), Shyonaka (*Oroxylum indicum*), Kashmarya (*Gmelina arboria*), Patala (*Sterospermum sauveolans*), Shalaparni (*Desmodium gangeticum*), Prushniparni

(*Uraria picta*), Bruhati (*Solanum indicus*), Kantakari (*Solanum xanthocarpum*), Gokshura (*Tribulus terrestris*)
Hareetakyadi Churna: Hareetaki (*Terminalia chebula*) & Shunthi (*Zingiber officinale*)

Study Design: Depicted in Table 1

Sample size: A minimum of 40 patients, 20 patients in each group were subjected to the study.

Posology: Dashamoola Kwatha: 50 ml - 3 divided doses- After food
Hareetakyadi Choorna: 12 gms - 3 divided doses- Before food

Duration of the study

30 days & follow up after completion of the treatment.

Statistical analysis: Statistical analysis was done by student t test, chi square test, fischer's exact test.

RESULTS

Total 40 patients were registered for the study & they were randomly distributed in two groups. Results before & after the treatment is cited in Table 2.

Total Effect of the Therapy

None of the patient was found with complete remission in both the groups. Marked improvement was found in 9 (45%) patients in Group A & none of the patients in Group B. Moderate improvement was found in 30% (6) patients in Group A & 3 (15%) patients in group B. Mild improvement was found in 5 (25%) patients in Group A & 7 (35%) patients in Group B. In Group A 0 patients (0%) & in Group B 10 (50%) patients were with no change.

DISCUSSION

Ama is undigested material produced due to hypo functioning of Agni at the level of Jatharagni as Sthoola Ama & at the level of Dhatvagni as Sukshma Ama. Ama which is formed due to disturbed Agni gets absorbed in the system & is taken up by the aggravated Vata mainly to the Sandhis.¹⁰ As per most of research work Ama is compared with free radicals which are intermediary metabolites & are produced due to improper metabolism¹¹. Amavata is compared with Rheumatoid arthritis. Rheum means stiffness, a characteristic feature of disease & in Amavata it is described as Stabdham cha kurute Gatram¹ (stiffness of the body).

As the disease is born out of Ama & vitiated Vata Dosha Shamanayogas which have definite action on Ama, vitiated Vata Dosha and immunosuppressant action in modern point of view are selected. The first shamana yoga (Dashamoolakwatha) is well known and popular drug which possess Shothahara (anti-inflammatory) and Vedanasthapaka (analgesic) qualities. Second Shamana Yoga Hareetakyadi Choorna contains Shunthi and Hareetaki. Shunthi helps in Amapachana. Hareetaki is well known for its Anulomana (laxative) and Rasayana (antioxidant) properties. These Yogas have been selected from Chakradatta.

Table 1: Duration of the study

Group	Method	Duration
A	Dashamoola Kwatha and Hareetakyadi Choorna with Pathyaahara and Vihara	30days
B	Only on Pathyaahara and vihara	30days

Table 2: Result of Laxanas Before & After the Treatment

Sl.No.	Laxanas	Group A	Group A	Group B	Group B	Significance
		BT	AT	BT	AT	
1.	SandhiRuja	20(100%)	3(15%)	20(100%)	12(60%)	0.008**
2.	Sandhigraha	20(100%)	6(30%)	16(80%)	10(50%)	0.751
3.	Sandhi Shotha	20(100%)	2(10%)	16(80%)	11(55%)	0.006**
4.	Warmthof the joints	16(80%)	2(10%)	16(80%)	11(55%)	0.014
5.	Redness of the Joints	13(65%)	1(5%)	13(65%)	8(40%)	0.008**
6.	Tenderness	18(90%)	4(20%)	14(70%)	10(50%)	0.096
7.	Angamarda	20(100%)	2(10%)	16(80%)	12(60%)	0.002**
8.	Range of Movement	16(80%)	5(25%)	14(70%)	11(55%)	0.320
9.	Aruchi	20(100%)	4(20%)	19(95%)	10(60%)	<0.001
10.	Jwara	7(35%)	0(0%)	7(35%)	4(20%)	0.106
11.	Baddhavitkata	17(85%)	0(0%)	17(85%)	10(50%)	0.002**
12.	Gaurava	20(100%)	2(10%)	17(85%)	12(60%)	<0.001

BT- Before Treatment AT- After Treatment

**p<0.01

Table 3: Total effect of Therapy in Patients of Group A & Group B

Overall Improvement	Group A n = 20		Group B n = 20	
	No.	%	No.	%
Completely Cured (100%)	0	0.0	0	0.0
Marked Improvement (75-99%)	9	45.0	0	0.0
Moderate Improvement (51 - 75%)	6	30.0	3	15.0
Mild Improvement (25-50%)	5	25.0	7	35.0
No Change (Below 25 %)	0	0.0	10	50.0

The symptom Sandhiruja (joint pain) after the treatment improvement was 45% better clinically in Group A than Group B. Better clinical outcome of Group A may be due to Vedanasthapaka (analgesic) effect of Dashamoola & Shoolaprashamana (analgesic) property of Shunthi. The symptom Sandhi Shotha (edema) after the treatment improvement was 50% better clinically in group A than Group B. Better clinical outcome may be due to Shothahara property of Dashamoola. In Sandhigraha (joint stiffness)the improvement was 50% better in Group A than Group B. This may be due to Shothahara (anti-inflammatory) property of Dashamoola.Range of movements the improvement was 41% better in Group A than Group B. Better result may be due to Shothahara & Vedanasthapaka property of Dashamoola. Tenderness the improvement was 49% better in Group A than Group B. The better result may be due to Shothahara (anti-inflammatory) & Vedanasthapaka (analgesic) property of Dashamoola. Aruchi 32% better clinical result may be due to Deepanapachana property of Shunthi. In Baddhavitkata (hard stools) 49% better result was found in Group A than Group B. Better result may be due to Anulomana (laxative) property of Hareetaki.In Amavata it is the Ama which is responsible for the whole scenario. So Shunthi with its Deepana Pachana (digestive & carminative) property plays a major role in the treatment.

CONCLUSION

Amavata is compared with Rheumatoid arthritis. As the disease is born out of Ama & vitiated Vata Dosha Shamanayogas which have definite action on Ama, vitiated Vata Dosha and immunosuppressant action in modern point of view are selected. The first shamana yoga (Dashamoolakwatha) is well known and popular drug which possess Shothahara and Vedanasthapaka qualities. Second Shamana Yoga Hareetakyadi Choorna contains Shunthi and Hareetaki. Shunthi helps in Amapachana. Hareetaki is well known for its Anulomana and Rasayana properties⁹.Statistical analysis of the data obtained leads to the conclusion that Dashamoola Kwatha & Hareetakyadi Choorna along with Pathya Ahara & Vihara is highly effective in Amavata. It can also be concluded that pathya Ahara & Vihara

alone doesn't produce results compared to Pathya Ahara & Vihara with Dashamoola Kwatha & Hareetakyadi Choorna.It can therefore be concluded as Dashamoola Kwatha & Hareetakyadi Choorna along with Pathya Ahara & Vihara has a significant effect in the treatment of Amavata.

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