



A CLINICAL STUDY ON AJMODADI CHURNA AND ERANDA TAILA IN THE MANAGEMENT OF AMAVATA (RHEUMATOID ARTHRITIS)

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Article Received on: 17/03/13 Revised on: 01/04/13 Approved for publication: 01/05/13

DOI: 10.7897/2230-8407.04647

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ABSTRACT

Despite amazing diagnostic techniques and medicines, our society is suffering from unpreventable epidemics of heart diseases, cancers, rheumatoid diseases and other autoimmune diseases. Amavata is a crippling disease caused due to ama. In this disease, doshas get mingled with ama and take seat of kapha specially joints causing swelling, pain and stiffness there. In modern system of medicine its very clinical correlate is rheumatoid arthritis, an autoimmune inflammatory disease. In spite of superb anti inflammatory and immunosuppressive drugs and biological agents it is very difficult to cure rheumatoid arthritis completely. These drugs have various multi system side effect on prolong use. On the contrary, Ayurvedic medicines have minimal or no side effects on long term use and there is improvement in quality of life as well. In present study 17 patients were selected randomly from OPD and IPD of Sir Sundar Lal Hospital, BHU, Varanasi, India to study the effect of Ajmodadi churna and Eranda taila. There was quite improvement in the symptoms and not any side effect was observed as such.

Keywords: ama, agni, amavata, rheumatoid arthritis, dipana, pachana.

INTRODUCTION

Ayurveda is a science of life. It indicates knowledge of appropriate and inappropriate, happy or sorrowful conditions of living, what is auspicious or inauspicious for longevity as well as measure of life itself.¹ It has so many treasures of life that make man disease-free, healthy and long living. Main objective of this science is to maintain the health of healthy and curing the ailments of the ailing.² Ama is the basic concept of Ayurveda in several diseases. Diseases occurring by Ama are the types of constitutional diseases. Amavata is the one of the disease caused by Ama. In the disease Amavata, Ama combines with the doshas and spreads all over the body and produces the symptoms. Amavata is one of the common diseases in the present era, which is mainly induced due to the improper food and life style. Occurrence of Amavata on large scale is one of the outcomes of life style modification. It is equated with Rheumatoid Arthritis (RA), an inflammatory autoimmune disorder. It is commonest among chronic inflammatory joint diseases in which joints become swollen, painful and stiff. It is a debilitating disease in view of its chronicity and complications. Therefore, it has taken the foremost place among the joint disorders. It continues to pose challenge to physicians due to severe morbidity and crippling nature and claiming the maximum loss of human power making it a biggest worldwide burning problem irrespective of races. No doubt allopathic system of medicine has got an important role to play in overcoming agony of pain, restricted movement and disability caused by the articular diseases. Simultaneously prolonged use of allopathic medicines are not only giving rise to many side effects, toxic symptoms and adverse reactions but also more serious complications like organic lesions etc. are caused by them. Hence the management of this disease is insufficient in other systems of medicine and patients are continuously looking with a hope towards Ayurveda to overcome this challenge. In terms of medicine, Ama refers to the factors that arise as a consequence of impaired functioning of agni (digestive fire), whereas in literal terms the word 'Ama'

means unripe, immature and undigested. This Ama is then carried by vayu and travels throughout the body and accumulates in the joints, at the weaker sites (khavaigunya).³ When it gets accumulated in joints it causes swelling and pain in joints causing amavata.

Aim and Objective

Present clinical trial was conducted to study the effect of Ajmodadi churna and Eranda taila on Amavata (rheumatoid arthritis).

MATERIAL AND METHODS

The patients were selected and registered after their fulfilment of diagnostic criteria of Amavata (RA). The patients were thoroughly questioned and examined on the basis of proforma which include both subjective and objective criteria. Ethical clearance and informed consent were obtained before conducting the clinical trial (Dean/2011-12/169 on 14/18-5-2011).

Selection of Drugs

Ajmodadi churna is one of the well known therapeutic preparations described in Chakradatta⁴. Eranda taila (castor oil) was used which is indicated in the disease by Bhaishjyarnavali.⁵ Identification was done in the department of Dravyaguna, IMS, BHU, Varanasi, India.

Preparation of Drugs

Churna (powder)

All the raw drugs were collected from Ayurvedic pharmacy, BHU, Varanasi, India. They were made into fine powder form. Ratio of the drug amount taken was⁶- vridhadaru, shunthi, haritaki and other ingredients; 1, 1, 1/2, 1/10.

Oil (Eranda Taila)

It was purchased from the market (Dabur Company).

Dose

Churna- 5g BD (with lukewarm water), Taila- 10ml BD

Selection of Cases

A total 20 patients of Amavata were randomly selected for the present study, from the Kayachikitsa OPD & IPD, Sir Sunder Lal Hospital, IMS, BHU, Varanasi, India of which 17 patients completed 3months follow up at 1month interval. The case selection was random regardless of sex, occupation and socio-economic conditions seropositive and seronegative conditions. Both acute and chronic phase of Amavata patients were taken for the study, following the criteria of the diagnosis of RA (EULAR 2010)⁷ and the clinical features of Amavata described in Madhava Nidana.⁸ Only 6 symptoms which are chief complaints in a patient of Amavata (RA) were taken in account for this clinical study. They are viz.

body ache (angamarda), indigestion (apaka), heaviness (guruta), stiffness (stabdhata), pain, and swelling of joints.

Inclusion Criteria

- Diagnosed cases of Amavata and RA
- Age between 20 to 60years
- Patient willing to participate in the above trial

Exclusion Criteria

- Patient with deformities and systemic complications.
- Patient suffering from DM, HTN, Tuberculosis, Asthma and other diseases.
- Pregnant and lactating women.
- Patient discontinuing the trial drug.
- Non willing patients.

Table 1: Selected Drugs with Botanical and Family Names

Sanskrit Name	Botanical Name	Family
Ajmoda	<i>Carum roxburghianum</i> (DC) Craib.	Umbellifereae
Maricha	<i>Piper nigrum</i> Linn.	Piperaceae
Pippali/Pippalimula	<i>Piper longum</i> Linn.	Piperaceae
Vidanga	<i>Embelia ribes</i> (Burm.)	Myrsinaceae
Devadaru	<i>Cedrus deodara</i> Roxb.	Pinaceae
Shatahwa	<i>Foeniculum vulgare</i> Mill.	Umbellifereae
Chitraka	<i>Plumbago zeylanica</i> Linn.	Plumbaginaceae
Haritaki	<i>Terminalia chebula</i> Retz.	Combretaceae
Shunthi	<i>Zingiber officinale</i> (Rosc.)	Zingiberaceae
Vridhadaru	<i>Argyria speciosa</i> Sweet.	Convolvulaceae
Eranda	<i>Ricinus communis</i> Linn.	Euphorbiaceae
Saindhava lavana	Rock salt (English name)	

Table 2: changes in 6 symptoms in total 17 patients of Amavata

Symptoms	Grading	BT		F ₁		F ₂		F ₃		Friedman test
		No.	%	No.	%	No.	%	No.	%	
Bodyache	0	0	0	0	0	3	17.6	16	94.1	$\chi^2=42.61$ p<0.001
	1	4	20	10	50	12	70.5	1	5.9	
	2	9	45	9	45	2	11.8	0	0	
	3	7	35	1	5	0	0	0	0	
	4	0	0	0	0	0	0	0	0	
Heaviness	0	3	15	5	25	5	29.4	13	76.5	$\chi^2=33.80$ p<0.001
	1	6	30	7	35	11	64.7	3	17.6	
	2	8	4	7	35	1	5.9	1	5.9	
	3	3	15	1	5	0	0	0	0	
	4	0	0	0	0	0	0	0	0	
Indigestion	0	0	0	1	5	4	23.5	11	64.7	$\chi^2=4.96$ p<0.001
	1	4	20	7	35	9	52.9	6	35.3	
	2	4	20	11	55	4	23.5	0	0	
	3	12	60	1	5	0	0	0	0	
	4	0	0	0	0	0	0	0	0	
Pain	0	0	0	0	0	0	0	10	58.8	$\chi^2=48.50$ p<0.001
	1	1	5	2	10	8	47.1	5	29.4	
	2	2	10	8	40	9	52.9	2	11.8	
	3	9	45	9	45	0	0	0	0	
	4	8	40	1	5	0	0	0	0	
Joint swelling	0	3	15	4	20	6	35.3	11	64.7	$\chi^2=41.16$ p<0.001
	1	3	15	5	25	11	64.7	6	35.3	
	2	6	30	11	55	0	0	0	0	
	3	8	40	0	0	0	0	0	0	
	4	0	0	0	0	0	0	0	0	
Stiffness	0	0	0	0	0	2	11.8	11	64.7	$\chi^2=47.82$ p<0.001
	1	3	15	5	25	10	58.8	6	35.3	
	2	5	25	11	55	5	29.4	0	0	
	3	10	50	4	20	0	0	0	0	
	4	2	10	0	0	0	0	0	0	

(BT=before treatment, F₁=1st follow up, F₂=2nd follow up, F₃=3rd follow up)**Table 3: after treatment presence of symptoms in total 17 patients of Amavata**

Grading with symptoms	Cured (0)	Markedly improved (1-2)	Moderately improved (3)	Mildly improved (4-5)	Unchanged
No.	10	1	0	5	1
Percentage	58.8	5.9	0	29.4	5.9

Investigations

All patients were subjected for the following laboratory examinations: Hb%, TLC (total leucocyte count), blood sugar, liver function test, blood urea, serum creatinine, ASO titre (to exclude rheumatic disease), only patients having normal levels were included in the study. Inflammatory markers of RA- RA factor, CRP, ESR, anti CCPab were also done. These investigations were done before initiation of treatment and after completion of the therapy.

Criteria for the Assessment of Amavata (Rheumatoid Arthritis)

- Symptomatic improvement.
- Side / toxic effect of the drugs if any.

Parameters for the Assessment of Symptoms

Intensity of the 6 symptoms was assessed on the following grading system

- No symptom
- Mild
- Moderate
- Severe but not restricting daily activity
- Severe and restricting daily activity

OBSERVATION AND RESULTS

Selected patients were allowed to take the churna (5g) and oil (10ml) orally to assess the efficacy. Assessment was done on the subjective and objective parameters. Significant changes were observed which are shown in the tables. However not any change was observed in the blood examination.

DISCUSSION

Rheumatoid (RA) is a chronic inflammatory disease of unknown aetiology marked by a symmetric, peripheral polyarthritis. It is the most common form of chronic inflammatory arthritis and often results in joint damage and physical disability. Amavata described in Ayurvedic texts has much similarity with RA. Chief complaints in this disease are stiffness in joints and multiple joint pain. However Ayurveda does not explain its autoimmune relation as with RA. Due to autoimmune mechanism still there is not any complete cure of RA.

Probable Mode of Action of Ajmodadi Churna

(On the basis of Ayurvedic pharmacological properties of the churna) In disease amavata, kapha and vata dosha are the main culprits. The combination shows main action against kapha and vata doshas by virtue of its virya (about 81% of total drugs have an ushna virya). From the samprapti (pathogenesis) of amavata, it is clear that the main dushya (tissue) involved is rasa. The combination shows, about 61% of total drugs have a katu rasa. Katu rasa improves the digestion and made first dhatu in proper form, so the combination will act on the rasa dhatu. In the combination, maximum percentage of the drugs like Shunthi, Pippali, Pippalimoola, Chitraka etc. show dipana, pachana property which improves the function of agni. The churna will stop the further ama production and help to break the basic pathology. Ama means unripe and undigested annarasa. It needs proper paka (digestion). By the virtue of ushna virya (81% of total

drugs) and dipana-pachana property, ama pachana will take place. Drugs like Sunthi, Pippali, Pippalimoola, Chitraka etc. are proved as a best amapachaka. So the preparation will act on the ama.

Probable Mode of Action of Eranda Taila

Eranda taila is kapha-vata shamaka and ushna virya. It act as dipana and also clears micro channels (srotoshodhana). It is mentioned as best vatahara (vata pacifying).⁹ So by virtue of all these property Eranda taila acts very efficiently in disease amavata. So considering all the above properties of each drug, preparations used work very effectively as a whole in the disease Amavata.

CONCLUSION

Amavata is a disease of multiple joint involvements characterised by joint pain, stiffness in pain, stiffness & swelling in joints, indigestion etc. Its very clinical correlate in modern medicine is rheumatoid arthritis, which is an autoimmune crippling disorder. According to Ayurveda basic pathology in the disease is formation of ama which is the result of hypo functioning of agni (digestive fire). Impairment of agni and formation of ama occurs not only due to faulty food habit but mental stress also renders these condition. So mainstay of the therapy lies on amapachana (digestion of ama) by normalizing the agni. Present clinical trial was carried out based on this principle. Significant changes in the subjective criteria were observed and not any abnormal haematological and biochemical changes were observed. So in this clinical study Ajmodadi churna and Eranda taila has shown significant effect in improving condition of amavata (RA).

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Cite this article as:

Mishra Pramod Kumar, Rai N.P. A clinical study on Ajmodadi churna and Eranda taila in the management of Amavata (Rheumatoid arthritis). Int. Res. J. Pharm. 2013; 4(6):211-213