

AYURVEDIC MANAGEMENT OF RHEUMATIC ARTHRITIS IN CHILDREN – A CASE STUDY

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ABSTRACT

Ayurveda aims at prevention of disease and maintenance of health. Arthritis occurs in approximately 75% of patients with acute rheumatic fever and typically involves larger joints, which makes the day to day work difficult. The case study discussed here is of 12 year old female child, who had recurrent episodes of pain in multiple joints of lower limb and frequently received treatment but got temporary relief and relapses were frequent. Then she came to *Ayurvedic* OPD and was given *ayurvedic* regimen (i.e *Bruhatvatachintamani Rasa*, *Trivanga Bhasma* and *Guduchi Satwa* along with external application of *Shunthi lepa* over joints). The child had significant relief from signs and symptoms of rheumatic arthritis. The recurrence or the frequency of disease was found markedly reduced. *Ayurvedic* regimen proved to be beneficial in this case of Rheumatic arthritis.

KEYWORDS: Rheumatic arthritis, *Aamavata*, *Ayurvedic* regimen.**INTRODUCTION**

The annual incidence of acute rheumatic fever in developing countries exceeds 50 per 100000 children. Arthritis occurs in approximately 75% of patients with acute rheumatic fever and typically involves larger joints, particularly the knees, ankles, wrists and elbows.^[2] Involvement of these joints leads to decreased efficiency in daily work. Therefore, the study was planned to make available an *Ayurvedic* regimen with more efficient targets and less side effects. The combination of three *Ayurvedic* drugs i.e. *Bruhatvatachintamani Rasa*, *Trivanga bhasma* and *Guduchi Satwa* along with external application of *Shunthi lepa* over joints was given in this for this case.

AIM: Management of Rheumatic arthritis in children by an *Ayurvedic* regimen.**OBJECTIVES**

- 1) To study the efficacy of *Ayurvedic* regimen in the management of rheumatic arthritis
- 2) To prepare an *Ayurvedic* line of treatment according to *samprapti* of disease in children
- 3) To analyse results

METHODOLOGY- To fulfill the aim and objectives of the study this work was carried out in the following phase wise manner

- 1) Conceptual study
- 2) Case study
- 3) Discussion
- 4) Result and conclusion

Conceptual study

Rheumatic Fever is an immunological disorder that follows infection of the pharynx by group A beta – haemolytic streptococci. It affects the heart, joints, CNS, skin and subcutaneous tissue. Upper respiratory tract infections (streptococcal), poor socioeconomic conditions and climate changes contribute to the risk of Rheumatic disease. Young children are more likely to develop recurrences. Therefore management of the disease in early age is crucial.

CASE STUDY

A female patient of 12 years old, reported to the *Kaumarbhritya* OPD of Government Ayurved Hospital, Osmanabad in June 2020 with following complaints since 4 years-

Recurrent episodes of

- Pain and redness of right knee joint
- Migratory pain from right knee joint to right ankle joint
- Fever before onset of pain

- Difficulty in walking due to pain

Associated complaints

- Nonspecific anorexia
- Frequent high grade fever

History of past illness- H/o recurrent episodes of migratory pain in knee joint preceded by fever in last 4 years

H/o recurrent respiratory tract illnesses

No h/o any other major illness or any surgery

Drug history- Frequent use of anti rheumatic drugs (Methotrexate), steroids and Non steroidal anti inflammatory drugs

Family history- no h/o same illness in the family

Birth history

- 1) Antenatal- Non specific
- 2) Natal- Full term normal delivery at hospital Baby cried immediately after birth, birth weight-2.5kg
- 3) Postnatal-No h/o NICU admission, No h/o neonatal jaundice/seizures

Immunization history- Regular

All vaccines given as per age.

General examination

Pulse: 86/min

BP: 110/60 mmHg

Temperature: 98.8 degree F

RR: 24/min

Systemic examination

RS: AEBE clear

CVS: S1S2 normal

CNS: Conscious and oriented

P/A: soft and non-tender

Anthropometry

- Height – 132cms
 - Weight –23 kg
 - Head circumference – 50cms
 - Chest circumference –78 cms
 - Mid arm circumference – 20 cms
- Diagnosis (clinical and investigations)
- Clinically on the basis of signs and symptoms (on the basis of Revised Duckett Jone's Criteria)
 - Acute phase reactants – ESR & CRP
 - ASO titre
 - X-ray both knee joint

Table No. 1: Showing Revised Duckett Jone's Criteria.^[3]

Major Criteria	Minor Criteria	Essential Criteria
• Arthritis	• Fever • Increased ESR, CRP	• Evidence of antecedent streptococcal infection

Her lab reports are summarised below

1. ESR – 35mm/hr
2. CRP – 14.7
3. ASO titre – positive
4. RA turbidimetry – negative
5. X-ray of both knee joints – normal

Table no. 2: Showing Grading for clinical features.

Clinical Features	Verbal descriptor scale		Before treatment	After treatment			Relief
				1 st week	2 nd week	3 rd week	
Pain in the right knee joint	No pain	0	4	3	2	1	90%
	Mild pain	1					
	Moderate pain	2					
	Severe pain	3					
	Extreme pain	4					

Clinical Features	Tenderness Grading, Soft tissues		Before treatment	After treatment			% Relief
				1 st week	2 nd week	3 rd week	
Tenderness	Tenderness with no physical response	1	3	3	2	1	90%
	Tenderness with grimace, wince and flinch	2					
	Tenderness with withdrawal (jump sign)	3					
	Non –noxious stimuli (eg: superficial palpation, gentle percussion)results in patient refusal to be palpated due to pain	4					

Clinical Features			Before treatment	After treatment			% Relief
				1 st week	2 nd week	3 rd week	
Warmth	No warmth	0	3	3	2	0	100%
	Mild	1					
	Moderate	2					
	Severe	3					

Clinical Features	Patellar tap test		Before treatment	After treatment			% Relief
				1 st week	2 nd week	3 rd week	
Swelling in the left knee joint	No swelling	0	3	3	2	1	90%
	Mild Swelling	1					
	Moderate swelling	2					
	Severe swelling	3					

Samprapti Ghatakas

1. Hetu: Agantuj
2. Dosha: VATA and PITTA
3. Dushya: Rasa, Rakta, Asthi
4. Agni: Jatharagnimandya

5. Srotas: Rasavaha Raktavaha Asthivaha
6. Srotodushti: Vimargagamana
7. Adhishthana: Sandhi
8. Rogamarga: Madhyam

Table No. 3: Showing Ayurvedic regimen.

Sr.no.		<i>Bruhatvatachintamani Rasa</i>	<i>Trivanga Bhasma</i>	<i>Guduchi Satwa</i>
1	Reference	<i>Bhaishjya Ratnavali – Vativyadhyadhikar, p-358</i>	<i>Rasatantrasaar va Siddhaprayog Sangraha – pg - 62</i>	<i>Bhaishjya Ratnavali – p -458</i>
2	Ingredients	<i>Swarna bhasma, Rajat bhasma, Abhraka bhasma, Loha bhasma, Prawaal bhasma, Mukta bhasma, Rasasindoor</i>	Vanga bhasma, Naag bhasma, Yashad bhasma	<i>Guduchi</i>
3	Dosha karma	<i>Vatahara</i>	<i>Vatahara Pittashamak</i>	<i>Vatahara Pittashamak</i>
4	Agni karma	<i>Deepen</i>	<i>Deepen</i>	<i>Deepen</i>
5	Anupana	<i>Madhu</i>	<i>Madhu</i>	<i>Madhu</i>

Table No. 4: Showing Oral Medications.

Formulation	Mode	Dose	Duration	Anupana
1) Lashoonadi vati	Oral	125 mg BD	8 days	Water
2) Bruhatwaatchintamani ras	Oral	10 tabs	21 days	<i>Madhu</i>
3) Triwanga Bhasma		10 gms		
4) Guduchi satwa		10 gms		
5) Haritaki churna	Oral	5 gms HS	21 days	leukewarm water

Table No. 5: Showing Panchakarma treatment.

Sr. no.	Panchakarma Procedure	Duration
1)	<i>Sthanik snehan</i> with <i>Eranda sneha</i>	21 days
2)	<i>Shunthi lepa</i>	21 days

OBSERVATION AND RESULTS

The patient was given treatment for 3 weeks and examined on 7th day, 14th day and 21st day.

During this period patient didn't develop any other complaints and relieved from existing complaints. Her acute phase reactants were repeated after 21 days of treatment –

ESR – 15mm/hr

CRP – 5

Patient reported gradual improvement in pain, swelling and difficulty in walking reduced. After treatment patient got significant relief.

Follow up after treatment

Patient is advised to continue *Mahamanjishthadi Kashayam* 5ml BD before meal with water for 3 months.

DISCUSSION

Ayurvedic regimen is a combination of three drugs which contain *Bruhatvatachintamani Rasa*, *Trivanga Bhasma* & *Guduchi satwa*.

Bruhatvatachintamani Rasa is a *suvarnakalpa* with *vatashamak*, *rasayan*, *balya* properties especially beneficial in *Aamvata*.

Trivanga Bhasma has following medicinal properties which are helpful in rheumatic arthritis for example – it is a good *vata* and *vatapittashamak*. It works on *rakta*, *mansa* and *asthi dushti*. It specially works on *Dushyas* like *Rakta*, *Mansa* and *Asthi*.

Guduchi satwa is a anti-inflammatory, anti-gout, immunomodulatory drug. It works on *dhatudoorbalta*.

Lashoonadi vati with its *deepana pachana* property works as a *amapachak* and helps in *Agnivardhana*.

Haritaki churna with its *vatanulomaka* and *virechana* property helps in expelling the toxic materials out of the body.

CONCLUSION

In the present case study, *sthanik snehan* with *Eranda sneha*, *shunthi lepa* and internal administration of *ayurvedic* regimen containing *Bruhatvatachintamani Rasa*, *trivanga bhasma*, *guduchi satwa*, *lashoonadi vati*

and *haritaki churna* shows significant effect. The overall effect of therapies showed 90% improvement in symptoms. There is no adverse reactions found with these drugs. Oral medications and *shunthi lepa* are effective in managing the symptoms of rheumatic arthritis in children.

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