



Case Study

AYURVEDIC MANAGEMENT OF RHEUMATIC FEVER: A SUCCESSFUL CASE REPORT

Sanand Ratnam Thekkayil^{1*}, Vasant Patil², Mabin³, Iglhyza Ratnam³

^{1*}Chief Medical Officer, Sree Subramania Ayurvedic Nursing Home, Calicut, Kerala.

²Research Advisor, Sree Subramania Ayurvedic Nursing Home, Calicut, Principal, Kjiar, Savli.

³Research Officer, Sree Subramania Ayurvedic Nursing Home, Calicut, Kerala.

ABSTRACT

Rheumatic fever is a rare but potentially life-threatening disease that may occur as complication of untreated infection caused by bacteria called group *Astreptococcus*. The main clinical features are -fever, myalgia, swollen and painful joints, and in some cases, a red, grille like rash typically manifest two to four weeks after a bout of streptococcal infection. In some cases, though, the infection might be too mild to recognize clinically. A 27year old male case was admitted in SSANH on 27/5/2015 with following chief complaints - severe pain and stiffness over multiple joints symmetrically since 2years, swelling of larger joints of both upper and lower limbs symmetrically since 2 years and recurrent episodes of fever accompanied with dyspnoea and body pain. The case was diagnosed as Rheumatic fever and treated with *Rasnasaphthakamkashayam*, *Rasasindhooram*, *Yogarajaguggulu* as main internal medications and treatments like *choornakizhi*, *Choornavasthi* and *Lavana Kizhi*. The Ayurvedic management provided better relief in subjective and as well as objective parameters.

KEYWORDS: Acute rheumatic fever (ARF), *Rasnasaphthakamkashayam*, *Rasasindhooram*, *Yogarajaguggulu*, *choornakizhi*, *Choornavasthi* and *Lavana Kizhi*.

INTRODUCTION

Acute rheumatic fever (ARF) and its long term sequel, rheumatic heart disease (RHD) is a major health problem in children, adolescents and young adults.^[1] Despite the tremendous progress made in cardiology, the menace of morbidity and mortality due to acute rheumatic fever and its consequences remain very high in India.^[2] Because of the preoccupation of the cardiologist with adult cardiac disease like ischemic heart disease, the problems of ARF/RHD have been sidelined and studies on prevalence, treatment and prevention receive only scant attention and only exotic palliative methods such as balloon mitral valvotomy, valve/replacement have become the centre stage in India.^[3]

In India, rheumatic fever is endemic and remains one of the major causes of cardiovascular disease, accounting for nearly 25-45% of the acquired heart disease. The annual incidence of rheumatic fever is 100-200 times greater than that observed in developed countries and fluctuates between 100-200 per 1,00,000 children of school age (from 5 years to 17 or 18 years depending on the study). India is in the phase of 'epidemiological transition'.^[4]

Recent data from India suggest that a large number of cases of ARF/RHD are still seen frequently in young children under the age of 10 years.^[5]

The major manifestations of ARF are: i) Carditis ii) Polyarthritits iii) Chorea iv) Erythema marginatum v) Subcutaneous nodules. The clinical profile of acute rheumatic fever seems to be changing (Figure 1). Clinical diagnosis of carditis was noted in at least 50% of acute rheumatic fever in the past. There seems to be a declining incidence of carditis. The diagnosis of carditis that is considered a major criteria in acute rheumatic fever depends on the clinical and traditional auscultatory findings.^[6]

Case History

A 27 year old male patient was admitted in SSANH on 27/5/2015 with following chief complaints.

1. severe pain and stiffness over multiple joints symmetrically since 2 years.
2. swelling of larger joints of both upper and lower limbs symmetrically since 2 years.
3. recurrent episodes of fever accompanied with dyspnoea and body pain.

History of present illness

2 years back he had an acute onset of severe pain over small joints of hands and foot. Gradually

the pain migrated to larger joints of both upper limb and lower limbs. 2 weeks later he developed swelling in larger joints and morning stiffness which lasted more than one hour. The pain was very severe that he could not even walk. The pain was aggravated while exposure to cold climate and during mornings. He had associated complaints- recurrent episodes of fever, dyspnoea and sore throat. He had very poor appetite and tastelessness which hindered him from eating well. At this stage he went to an allopathic physician and took medicines and got temporary relief of pain and swelling. Few weeks later he had developed severe burning sensation over his joints. Doctor advised him to continue the medication for 3 months. Later he noticed presence of small nodes in back of shoulder and behind the knees which were painful. Also slight lateral deviation of both hands was noted. As the pain and other symptoms were getting worsened day by day, he was admitted in our hospital for better management.

History of past illness

Patient described a past history of high grade fever with associated sore throat symptoms at his age of 12. Thereafter he had recurrent episodes of fever and upper respiratory disturbances with cough, catarrh and body pain.

Treatment History

He was hospitalized many times for the illness and had courses of antibiotics. Symptoms

were subsided temporarily each time and he was discharged.

Physical Examination

Pulse: 72/ min Appetite : reduced
Temperature: 98.6 Bowel : constipated
Respiratory rate: 12/min Bladder :normal
Heart Rate: 60/min Sleep :disturbed
Blood Pressure: 130/90 mm of Hg

Systemic examination

Musculoskeletal system was found affected

Inspection: Swelling was present over both knees, both ankles, both elbows.

Palpation: Temperature was present. Tenderness present on both knees, ankles, wrists, fingers and toes.

Range of Movements: Painful Movements over both knee joints, ankles, wrists, fingers and toes.

Diagnostic Assessments

Investigations

Blood sugar, Serum Cholesterol, Uric Acid were within normal limits.

RA factor- negative

ESR- 52 mm /hour

ASO (Antistreptolysin O)-400 IU/ml.

Diagnosis: Rheumatic fever

Treatment interventions

Table 1: Internal medications administered (27/5/2015 to 16/6/2015)

Serial no.	Name of the medicine	Dosage	Frequency
1	<i>Balarishtam</i> ^[7]	25ml	Twice a day after food
2	<i>Kaisoraguggulu</i> ^[8]	1 tab	Twice a day after food
3	<i>Rasasindooram</i> ^[9]	125mg with ginger juice	Twice a day
4	<i>Agasthyarasayanam</i> ^[10]	5gm	Twice a day
5	<i>Thalesapatradichoornam</i> ^[11]	5gm	Thrice a day
6	<i>Rasnasapthakam Kashayam</i> ^[12]	15ml <i>Kashayam</i> with 45ml lukewarm water	Twice a day before food
7	<i>Yogarajaguggulu</i> ^[13]	1 tab	Twice a day before food

Table 2: External Therapies administered 27/5/2015 to 16/6/2015

Duration	Treatment	No. of days	Medicine used
27/5/2015 to 9/5/2015	<i>Choornakizhi</i>	14	<i>KottamchukkadiChoornam</i>
29/5/2015 to 4/6/2015	<i>Choornavasthi</i>	7	<i>VaiswanaraChoornam</i>
10/6/2015 -16/6/2015	<i>Lavanakizhi</i>	7	<i>KottamchukkadiChoornamwithSaindhavalavanam</i>

Observations and results

The patient was feeling much better with only chief complaints such as pain and swelling over the joints. Morning stiffness and burning sensation were also reduced. He is now able to walk and do his daily

activities. His appetite was improved with a normal bowel. Sore throat symptoms still persist mildly.

Discharge medicines for 2 weeks duration**Table no. 3: Discharge medicines given**

No.	Medicine	Dosage	Frequency
1	<i>Agasthyarasayanam</i>	5gm	Twice a day
2	<i>Taleesapatradichoornam</i>	5gm	Thrice a day
3	<i>Aswagandharishtam</i> ^[15]	30ml	Twice a day after food

Follow up assessments

The patient was discharged on the 21st day (16/6/15) and advised to continue the discharge

Assessment of effect of therapies**Table no. 4: Effect of therapies on subjective and objective parameters**

Sr.	Parameters	Before treatment (27/5/2015)	16/6/2015	14/11/2015
1	Pain	+++	+	Nil
2	Joint swelling	+++	Nil	Nil
3	Morning stiffness	++	+	Nil
4	burning sensation	++	Nil	Nil
5	Appetite	+	++	++
6	Sore throat	+++	++	+
7	ASO	400 IU/ml		59 IU/ml
8	ESR	30mm/hour		0-10mm/hour

DISCUSSION

Rasna (Vanda roxburghi), *Amruta (Tinospora cordifolia)*, *Devadaru (Cedrus deodara)* etc. of *Rasnasaptaka Kashaya* neutralizes the *Ama*, increases appetite, reduces pain and swelling.

The main ingredient of *Kaisoraguggulu* is *Guudci*. *Guduchi* possesses the qualities of *Tikta*, *Kashaya Rasa*, *Madhur Vipak*, and *Ushana Veerya*. *Guduchi* have the dual action of *Vata Shamana* and *Bruhana*, on the tissues, especially the *Asthi Dhatu*.^[16] *Guduchi* contains glycosides, whose activity resembles that of nonsteroidal anti-inflammatory agents producing anti-inflammatory and anti-arthritis activities.^[17]

Rasasindooram is *Shadrasayukta*, *Ushana* in *Veerya*, *Madhura* in *Vipaka* and has got *Guru*, *Snigdha*, *Vajeekara* and *Sarvarogahara* properties.^[18]

Yogaraj Guggulu is a widely used Ayurvedic formulation. In a retrospective study for the frequency of, usage, *Yogaraj Guggulu* ranked first in the hospital practice and second in the private practice.^[19] This formulation is used in conditions like arthritis, myalgia and hyperlipidemia. It has been shown to have significant anti-inflammatory activity in formaldehyde-induced arthritis and in croton oil granuloma.^[20]

medicines for 2 months and to come to OPD for review.

On follow up medicines were repeated for 2 more months and he was instructed to do lab investigations for ASO titer and ESR. On next follow up on 14/11/2015 his complaints were relieved and lab report showed normal values for ASO titer and ESR. No recurrence of symptoms like pain and swelling over joints, fever accompanied with body ache were reported later on. The patient is now able to perform day to day activities with comfort.

CONCLUSION

From the above case report, it can be said that, the rheumatic fever can be managed effectively by oral palliative medicines and panchakarma therapies.

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***Address for correspondence**

Dr. Sanand Ratnam
Chief Medical Officer, Sree
Subramania Ayurvedic Nursing
Home, Calicut-673010.
Mob. +91 9995449589
Email: cmo@ssanh.com

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