



Case Report

Effect of *panchakarma* and Ayurvedic treatment in postpartum rheumatoid arthritis (*amavata*): A case studyShailesh V. Deshpande ^{a,*}, Vaishali S. Deshpande ^b, Shraddha S. Potdar ^a^a PDEA's College of Ayurved and Research Centre, Sector 27, Akurdi, Pradhikaran, Pune 411044, India^b Sumatibhai Shah Ayurved College, Malwadi, Hadapsar, Pune, India

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ABSTRACT

Dream of a mother is to get involved actively in upbringing of child, which is impeded if she is suffering from painful condition like rheumatoid arthritis (RA) in postpartum phase. It causes physical incapacity and psychological trauma as well. Present case is a patient who developed RA one month after full term delivery by caesarean section. In view of symptoms, she was diagnosed as case of *amavata*. She received Ayurvedic treatment – *Simhanada guggulu*, *Pratapalankeshwara rasa*, *Dashamoola katutraya kashaya* and combination of *Swarnabhupati rasa*, *Tapyadi loha*, *Mahavatavidhvansa*, *Chopachini (Smilax china)*, *Shunthi (Zinziber officinale)* and *Guduchi (Tinospora cordifolia)* for four months and course of *kala basti* (medicated enema) along with application of medicated oil (*Vishagharbha taila abhyanga*) and sudation (*bashpa sweda*) for ten days. Complete remission was seen after treatment for four months. The patient was free from oral analgesics. RA test titer that was 160 international units per milliliter (IU/ml) before treatment showed marked reduction (28.12 IU/ml) after 75 days of treatment and later dropped in normal range (6.1 IU/ml). Normal milestones were seen in the child receiving breast feeding. Application of Ayurvedic principles showed excellent results in this case where modern medical management options were limited due to lactation.

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1. Introduction

Rheumatoid arthritis (RA) is a chronic multi-system disease, with characteristic features of persistent inflammatory synovitis that usually involve peripheral joints in symmetric distribution [1]. Persistent synovial inflammation often causes cartilage damage and bone erosions that badly disturbs joint integrity, as an outcome of which one third of patients suffer from working disability by five years [2]. RA is correlated with *amavata* mentioned in Ayurveda [3].

Further discussed patient is a known case of RA showing classical symptoms, with positive RA factor and raised erythrocyte sedimentation ratio (ESR). Patient had history of delivery by caesarean section seven months before. In view of lactating phase and inability to cope up with baby care, it was necessary to provide quick relief by using safe treatment modalities not just for the mother but for the child as well. The patient was diagnosed as a

case of *amavata* and was treated according to principles of treatment of *amavata*. She received oral Ayurvedic medicines for four months and a course *panchakarma* treatment of application of medicated oil, sudation and *kala basti* (medicated enema) for ten days.

Remarkable improvement was noticed in pain, swelling, morning stiffness and restricted joint movement within first two months. Previously, patient used to take oral analgesics, which were sparingly required in only first month. RA factor showed marked reduction after two months which later reduced within normal range. Liver and renal profile after two weeks after completion of treatment were within normal limits.

2. Case report

A 27-year-old female patient came to the out-patient department, with complaints of pain and swelling in bilateral corpopalangeal joints, both knees and ankles along with morning stiffness lasting 75–90 min, anorexia, body ache for six months. She had history of full term delivery by caesarean section seven months prior and the said symptoms were seen within a month after

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delivery. Reasons for caesarean section were prolonged labor and fetal distress. It was first maternity for the patient. Pain was severe and the patient used to take oral analgesics twice daily, but temporary relief was noticed. Physical examination showed tenderness and raised local temperature at affected joints along with stiffness. Radial pulse showed tachycardia (100 beats per minute). Laboratory investigation showed that RA factor and anti-cyclic citrullinated peptide antibody (anti-CCP antibody) were positive (RA test titer 160 IU/ml and anti CCP antibody more than 200 units per milliliter). ESR was also raised (38 mm after 1 h by Wintrob's method). Hemogram showed mild anemia but other parameters were within normal range (hemoglobin 10.8 gm%, total leucocytes 8800 per cubic millimeter). C-reactive protein and uric acid were also within normal range (0.9 milligram per deciliter (mg/dl) and 3.4 mg/dl respectively).

3. Diagnosis

According to American College of Rheumatology (ACR) and European league against rheumatism (EULAR) criteria 2010, it was case of RA [4]. According to Ayurveda differential diagnoses considered were *amavata* [5], *vatarakta* (~gout) [6] and *sandhigatavata* (~osteoarthritis) [7]. In view of involvement of small as well as big joints and absence of any symptoms related to vitiation of *rakta* (~blood) possibility of *vatarakta* was ruled out. The absence of *vatapurna druti sparsha* lead us to rule out *sandhigatavata*. Hence owing to the body ache (*angamarda*), anorexia (*aruchi*), stiffness (*stambha*) and severe tenderness at joints it was diagnosed as case of *amavata*.

4. Treatment

Patient received *Simhanada guggulu* 250 mg and *Pratapalankeshwara rasa* 250 mg thrice daily after food. *Dashamoola katutraya kashaya* was advised 20 ml twice daily after food with warm water. Combination of *Swarnabhupati rasa* 60 mg, *mahavataividhvansa* and *Tapyadi loha* 125 mg each along with *Chopachini* (*Smilax china*), *Shunthi* (*Zinziber officinale*) and *Guduchi* (*Tinospora cordifolia*) each 250 mg was advised twice daily with honey. Patient also underwent *panchakarma* treatment that included application of medicated oil (*vishagharbha taila abhyanga*) and sudation (*bashpa sweda*) of whole body in wooden steam chamber and *kala basti* (ten sitting of *anuvasana basti* and six sitting of *niruha basti*). *Anuvasana basti* was administered with *pippalyadi taila* 60 ml, honey 10 ml and rock salt (*saidhava*) 3 g. For *niruha basti* 500 ml of decoction of *dashamoola*, *Shunthi* (*Z. officinale*), *Guduchi* (*T. cordifolia*), *Punarnava* (*Boerhavia diffusa*) and *Daruharidra* (*Berberis aristata*) with paste of tamarind and jaggery 100 ml, cow's urine (*gomutra*) 100 ml, *Pippalyadi taila* 40 ml, honey 30 ml and rock salt (*saidhava*) 5 g was used. Only *anuvasana basti* was administered on first, eighth, ninth and tenth day while both *niruha* and *anuvasana* were administered from second to seventh day. So 16 sittings of *kala basti* were completed in ten days. Patient continued oral medications and application of *Vishagharbha taila* on affected joints at home for further three months.

Table 1
Treatment outcomes.

No.	Time line	Joint pain	Morning stiffness	Anorexia	Body ache	RA factor	Analgesics needed
1	Base line – May 2015	Severe	90 min	Present	Present	160 IU/ml	Twice daily
2	15 days after treatment – May 2015	Slightly reduced	90 min	Markedly reduced	Markedly reduced	Not done	Once daily
3	45 days after treatment – June 2015	Markedly reduced	25–30 min	Absent	Absent	Not done	Once daily
4	75 days after treatment – July 2015	Markedly reduced	15–20 min	Absent	Absent	28.12 IU/ml	Twice in 30 days
5	120 days after treatment – September 2015	Absent	Absent	Absent	Absent	6.1 IU/ml	Not needed
6	One year after treatment – May 2016	Absent	Absent	Absent	Absent	Not done	Not needed

Abbreviations: RA – Rheumatoid arthritis, IU/ml – international units per milliliter.

5. Treatment outcomes [Table 1]

At the end of first 15 days of oral medication and *panchakarma* treatment, edema and tenderness in both knee and corpopalangeal joints were slightly reduced but there was marked reduction in bodyache and anorexia. Requirement of analgesics was also slightly reduced (once per day). Morning stiffness was as before. After one month of *panchakarma* and 45 days of oral medication there was marked reduction in morning stiffness (25–30 min). After 75 days of oral medication, tenderness and edema in all affected joints and morning stiffness were grossly reduced. Anorexia and body ache were not seen. Analgesics were required only twice during the period by the patient. Titer of RA factor also dropped to 28.12 IU/ml, slightly above normal range. Patient continued same treatment for two more months. After completing four months of oral medication and *panchakarma*, patient was absolutely symptom free and needed no analgesics. She could bear all her responsibility in upbringing of child and could enjoy her motherhood. RA factor was within normal range (6.1 IU/ml). Hepatic and renal profiles done two weeks after treatment were within normal limits (total serum bilirubin 0.9 mg/dl, indirect 0.3 mg/dl, direct 0.6 mg/dl, alanine aminotransferase (SGPT) 33 mg/dl, aspartate transaminase (SGOT) 39 mg/dl, serum creatinine 0.8 mg/dl, serum urea 29 mg/dl). Patient is continuing regular follow up in our out-patient department and does not show aggravation of the disease (till May 2016).

6. Discussion

Worldwide prevalence of RA is estimated between 0.3% and 1% and is commonly seen in women in developed countries [8]. In India the prevalence is estimated to be 0.75% [9]. Though causes of RA are not yet clearly understood, it is believed to affect persons who are genetically susceptible as a manifestation of response to an infectious agent [1]. But it is a well observed fact that there is increased risk of RA in postpartum period [10,11]. Disability caused due to the disease creates great psychological suffering especially in postpartum stage and may affect baby care as well. In present case along with painful and swollen joints, psychological and social trauma, caused due to inability of patient to look after baby, at the time when needed the most, was matter of concern.

Researchers in Ayurveda have correlated RA with *amavata* or *vatarakta* as well. In present case, in view of typical intense pain, anorexia, body ache and stiffness, lead to the diagnosis of *amavata*.

Neither aetiological factors of *amavata* mention pregnancy or labor as causes nor *amavata* is mentioned as puerperal disease in Ayurvedic classics. But pregnancy exerts maternal body to an extent that it leads to severe depletion (*kshaya*) of body tissues (*dhatu*) along with laxity (*dhatu shaiithilya*). It is further aggravated by loss of *rakta* (~blood) and *kleda* (~fluid) during exhausting process of labor, making maternal body '*shunyavat*' (annihilated) [12]. The diseases caused in postpartum phase are difficult to treat. Hence it can be understood that aggravation of *vata*, seen in puerperal stage is capable of causing *amavata*. Such causality can only be confirmed by more studies.

Ayurvedic treatises explain specific diet and strolling pattern in postpartum phase (*sutika paricharya*) [13], which the present patient did not follow. This specific regimen in puerperal stage can help in avoiding diseases at this stage, but it remains unexplored.

Aim of treatment in this case, was not only to treat *amavata* but also to correct depletion of *dhatu* seen in postpartum stage and additional concern was lactation. *Simhanada guggulu* is the drug of choice in *amavata* (RA) due to its capacity to improve digestive fire (*agni*), pacify vitiated *vata* and *kapha* especially in joints and improve strength of joints [14]. *Pratapalankeshwara rasa* is beneficial in view of its pacifying effect on *vata* aggravated in postpartum stage [15]. *Dashamoola katutraya kashaya* is a unique combination of *dashamoola*, *trikatu* and *vasa* (*Adathoda vasica*). While all medicines are beneficial in postpartum stage; like *dashamoola* are useful in pacifying *vata*, *trikatu* are helpful in improving digestion, *vasa* is useful in nourishing (*prasadana*) *rakta* (~blood), the combination has added advantage due to its ability to reduce pain in joints [16]. *Swarnabhupati rasa* contains bhasma of gold, copper, iron, silver, mercury, sulfur and *vatsanabha* (*Aconitum ferox*) triturated with juice of *hansapadi* (*Adiantum philippense*). It is a well known medicine in different diseases caused due to *vata* and *kapha* especially related with musculo-skeletal system [17]. It also improves digestive fire (*agni*). *Tapyadi loha* another classical medicine that is beneficial to improve *rakta* (~blood). *Chopachini shunthi and guduchi* are useful in digestion of *ama* and reduce obstruction in passage of *vata*. Hence combination of *swarnabhupati rasa*, *tapyadi loha*, *mahavatavidhvansa*, *chopachini*, *shunthi* and *guduchi* was useful to remove obstruction in passage of *vata* without vitiating it, in digestion of *ama* and to relieve pain. Oral medicines received by patient though contained metallic and mineral preparations, no untoward effects were seen on hepatic and renal profiles.

Ayurvedic classics confine use of oils for external application and advocate use of dry sudation (*ruksha sweda*) in *amavata* [14]. It would greatly help in patients having more vitiation of *ama* as compared to *vata*, so that glutinous (*styana*) and slimy (*pichchila*) *ama* can be controlled. In present case, in view of severe vitiation of *vata* in postpartum stage instead of dry sudation, fomentation with steam (*bashpa sweda*) was seen more effective.

Basti is the treatment of choice for *vata* ailments. In *amavata*, *vaitarana basti* is popular treatment widely practised and studied as well. In this patient considering severe aggravation of *vata* in postpartum stage instead of *vaitarana basti*, *kala basti* using medicines useful in pacifying *vata* and *kapha*, reducing edema and pain were used. Multiple medicines along with *panchakarma* were necessary in this patient to give wholesome relief.

Conventional modern treatment of RA shows promising results, but is associated with possible side effects. Also all medicines are not safe in lactation [18]. Hence medicines available are limited and might be harmless only for short duration. In this case patient was habitual to take oral analgesics. But the dependency ended after

treatment. Throughout treatment patient continued breast feeding. The baby showed normal growth and development. Having said this, it is important to establish safety of Ayurvedic treatment in lactation through more studies.

7. Conclusion

Now-a-days, incidence of *amavata* in postpartum stage is increasing. With apt application of Ayurveda principles good results can be seen. This is effect seen in this case and needs more studies to substantiate effect of Ayurveda treatment in *amavata* (RA).

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