



AYURVEDIC MANAGEMENT OF CHRONIC RHEUMATOID ARTHRITIS WITH BILATERAL HIP INVOLVEMENT: A CASE REPORT

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ABSTRACT

Rheumatoid Arthritis (RA) is a chronic inflammatory disease characterized by joint swelling, joint tenderness, and destruction of synovial joints and leads to severe disability and premature mortality. The hip joint involvement in RA patients may develop rapidly and leads to joint destruction and joint replacement. Here we are reporting a case of chronic RA with bilateral hip involvement came with severe pain, stiffness, weakness at both thighs and hips and got advised for surgery. The Ayurvedic diagnosis and line of treatment of 'Urustambha' was applied and found that, patient got relief from pain, fever, reduction in stiffness and weakness of thighs, improved range of motion at hip and knee joints and able to do her routine activities with minimum support along with improvement in quality of life after doing continuous panchakarma procedures like, udwartana, vasti and choorna pinda sweda for the period of more than five months. Ayurvedic panchakarma procedures especially udwartana along with internal medicines, seems to provide relief even for the patients who got advised for hip replacement surgery.

Key Words: Rheumatoid arthritis of hip, Hip replacement surgery, Urustambha, Udwartana, Ayurveda, Panchakarma

INTRODUCTION

Rheumatoid Arthritis (RA) is a chronic inflammatory disease characterized by joint swelling, joint tenderness, and destruction of synovial joints and leads to severe disability and premature mortality.¹ Larger joints like knee, shoulder, elbow and hip joints may also get affected by RA during early phase of the disease. The hip joint involvement in RA patients may develop rapidly and leads to joint destruction and joint replacement. In 26% of patients, who had persistent and active RA, hip joint involvement was found within six months after onset of the disease.² Patients with RA frequently undergo total hip replacement and this surgery provides sustained overall beneficial impact in their lives.³

RA was compared with the Ayurvedic condition called 'Amavata' by previous scholars.⁴ Even though, plenty of research has been conducted on Amavata / RA in Ayurvedic field, there is lack of data or studies on Ayurvedic understanding and management hip involvement in RA. Here we are reporting a case of chronic RA, suitable case for hip replacement surgery, came for Ayurvedic treatment to avoid surgery. Written informed consent was obtained from the patient for the publication of this case report.

CASE DESCRIPTION

A 50 years aged female patient came to our care (12.05.2015) with the complaints of, pain, stiffness, weakness and heaviness at both thighs (Left > Right), unable to walk, sit, climb, bend and do her regular activities without support, low grade fever, pain and swelling at both knee joints and generalized weakness. Pain and stiffness gets worse during early morning hours, late evenings and after vigorous activity. The pain was dull, aching and located near groin, thigh and buttocks. These problems have been developed gradually and progressive in nature since 1997. Patient has developed constipation and loss of appetite initially.

Later she had suffered with episodes of fever, swelling and pain at various joints of the body especially at both hip and knee joints. During this period patient took allopathic consultation and treatment but didn't get constant relief. Patient was diagnosed as 'Rheumatoid arthritis of both hips during this period. Patient was also diagnosed as having 'bilateral osteo arthritis of knee. Since last two years (2013) patient had developed severe stiffness, weakness at thighs and lower limbs and pain at both hip joints. Patient slowly developed restriction in movements of lower limbs and got disabled, crippled with the disease. Patient opted Ayurvedic treatment as she got advised for hip replacement surgery which she didn't wish to undergo.

Patient was non smoker, non alcoholic and not having allergy to any substance. Patient had past history of post herpetic neuralgia, appendicitis and septicemia due to chronic, recurrent urinary tract infection. No positive family history found. At the time of examination, patient had restricted movements at both hips (Left > Right) and pain during movements. Swelling and crepitations were present at both knee joints. There were no deformities found at metacarpo phalangeal and inter phalangeal joints. Hemoglobin levels were decreased and ESR (Erythrocyte Sedimentation Rate), RA (Rheumatoid factor) was found increased. All other hematological reports and biochemical tests were found normal. Urine routine & microscopic examination as well as culture & sensitivity reports revealed infection. X-Ray of bilateral hip joints revealed, active destruction of both hip joints (Left > Right) (Table 1).

Diagnosis, Assessment & Treatment

Based on the history of patient, physical examination, hematological findings (elevated ESR & positive RF), and severe hip joint destruction in radiographic findings, the patient was diagnosed as having RA of bilateral hip joints (Table 1). Total two assessments were carried out, before treatment and at the time of discharge. Criteria of assessment were based on the

scoring of 'Arthritis Impact Measurement Scales 2' (AIMS2). The AIMS is a widely used disease specific measure that has a broad scope, measuring many aspects of health status. AIMS2 contains 101 items or questions which are categorized under 12 subscales (mobility, physical activity, dexterity, household activity, social activity, activities of daily living, pain, depression, anxiety, arm function, social support and work) and the content of this scale is based on 5-factor structure (physical, work, affect, pain and social interaction).⁵

The patient was diagnosed as "Urustambha⁶ with Ushna vata". The treatment is primarily based on to reduce the pain, stiffness, to improve the mobility and general condition of the patient. Treatment mainly consisted udwartana (powder massage) along with internal medicines. Treatment was revised frequently according to the condition and need of patient (Table 2 & 3).

DISCUSSION

Saama vata lakshana's⁷ like, vibandha (constipation), agni saada (loss of digestive capacity), vedana (pain) and aggravation at signs and symptoms during early morning hours and at late evenings were present in the patient. Stabdha (rigidity/spasticity), agni maandya (loss of digestive capacity), vibandha, ajeerna (indigestion), gamana kricchrata / gati vaishama (difficulty in walking or movements) etc; avrita vata lakshana's⁸ were also seen in the patient. The main complaint of the patient was heaviness, weakness, pain and stiffness at both thighs, based on which the diagnosis of "Urustambha"⁶ was made and rookshana procedure like udwartana was started along with internal medicines like, Abhyarishta (to relieve constipation / vatanulomana purpose), Ashtavarga kashaya (to relieve pain / vata hara purpose) and Yavaloha choornam (for lekshana purpose).

Patient took five months' continuous treatment, which includes various panchakarma procedures, internal medication and physiotherapy. During initial screening it was found that, RF (Rheumatoid Factor) and ESR (Erythrocyte Sedimentation Rate) levels were elevated and hemoglobin levels were decreased (Table 1). All modern medicines were stopped before starting Ayurvedic treatment. Patient also had jwara (fever) for which, Amrutottara kashayam / Sudarshana Ghana vati were prescribed and to manage urinary tract infection, Chandra prabha vati was prescribed (Table 2). Procedures like, upanah sweda at knee joints (for providing relief in knee joint pain and swelling), choorna pinda sweda (massage with the bolus prepared by

herbal powders) and Kala vasti (decoction & oil enema protocol) schedules were also initiated to treat pain, spasticity and to improve movements at hip joints (Table 3).

Patient felt lightness in body, improved appetite, reduced pain and swelling at knee and hip joints and improvement in range of motion of lower limbs after doing udwartana. During choorna pinda sweda and vasti procedures, patient frequently complained of, feeling heaviness in body, feverishness, aggravation of pain and swelling at knee joint. Due to these problems, frequent interruptions occurred during vasti procedure and choorna pinda sweda procedure. It indicates that patient had 'anupashaya (non suitability)' for bahya (external) and abhyantara (internal) snehana (unctuousness) and 'upashaya (compatibility / suitability)' for rookshana procedures which further substantiated our diagnosis of 'Urustambha'. History and clinical presentation of the patient resembled with the condition of "Urustamba" explained in Ayurvedic classics. As urustambha is a kapha predominant disease, rookshana procedures are indicated in its management. In accordance with the line of treatment of Urustambha, kshapana and shoshana (complete extraction and absorption of liquid fraction)⁹ procedures and medicines were prescribed in present case. Patient has responded positively to 'Urustambha chikitsa'. One previous study concluded that, some of the transverse myelitis patients resemble with the condition of 'Urustambha',⁹ but the present case of RA of hip joints also resembles with the clinical picture of 'Urustambha'.

Assessment of treatment efficacy on AIMS2 revealed that, there was 45% of relief in 'pain subscale', good improvement was observed in 'physical functioning' (24.1%) and 'social interaction' (21.4%) domains. As the patient was crippled with hip pain and spasticity and unable to do her regular activities without support, the subscale 'role' was not applicable in present case. There was worsening in 'mood subscale', which may be due to long term (more than 5 months) indoor treatment and high expectations of relief from the patient. Overall there was good improvement in mobility of lower limbs (hips & knees), pain and functioning (Table 4). At the time of discharge patient was satisfied as she was able to walk, climb the stairs and do her daily activities without pain and with minimal support. At the time of discharge (28.10.2015), pancha tikta ghrutam and chandra prabha vati were prescribed as shamana therapy (pacifying treatment) along with udwartana (Table 2 & 3).

Table 1: Investigation reports

Date	Name of investigation	Report
30.06.2015	1. Urine routine & microscopic examination	Normal
	2. RF (Rheumatoid Factor)	56 IU / ml
	3. Hemoglobin	11 gm / dl
	4. Malaria parasite	Not detected
11.07.2015	X-Ray of both hip joints (Antero Posterior view)	Severe degenerative changes of both hip joints with reduced space
23.08.2015	Urine microscopic examination	Pus cells: 15 – 20 / HPF
19.09.2015	1. Hemoglobin	10.7 gm / dl
	2. ESR (Erythrocyte Sedimentation Rate)	47 mm in one hour
	3. Serum Calcium	9.5 mg / dl
	4. RF	66.4 IU / ml
30.09.2015	Urine microscopic examination	Pus cells: 1 – 2 / HPF
01.10.2015	Urine for culture and sensitivity	Enterococcus species organisms were isolated
04.10.2015	Vitamin B ₁₂ , Renal function tests (serum urea, creatinine and uric acid)	Normal report

Table 2: Medication

Duration	Medicine	Dose	Frequency & Time of administration	Anupaana
12.05.2015 to 16.05.2015	1. Yavaloha choornam	3 gm	Thrice a day, after food	Butter milk
	2. Ashtavarga kashayam	15 ml	Twice a day, before food	With 45 ml of water
	3. Abhayarishta	20 ml	Twice a day, after food	with 20 ml of water
17.05.2015 to 18.06.2015	1. Yavaloha choornam	3 gm	Thrice a day, after food	Butter milk
	2. Ashtavarga kashayam	15 ml	Twice a day, before food	With 45 ml of water
	3. Trikatu choornam	3 gm	Twice a day, after food	Butter milk
	4. Ashwagandha choorna + Pippalimoola choorna + Chopchini choorna + Rasa sindhoora	2 gm + 1 gm + 500 mg + 60 mg	Twice a day, after food	Honey
19.06.2015 to 30.06.2015	1. Abhayarishta	20 ml	Twice a day, after food	with 20 ml water
	2. Arogya vardhini vati	500 mg	Twice a day, after food	with water
	3. Sahacharadi kashayam	15 ml	Twice a day, before food	with 45 ml of water
01.07.2015 to 15.07.2015	1. Sanjivani vati	500 mg	Twice a day, after food	with ginger juice
	2. Sudarshana Ghana vati	500 mg	Twice a day, after food	with water
16.07.2015 to 31.07.2015	1. Varanadi kashayam	15 ml	Twice a day, before food	with 45 ml of water
	2. Chandraprabha vati	500 mg	Thrice a day, after food	Water
01.08.2015 to 30.09.2015	1. Abhayarishta	20 ml	Twice a day, after food	with 20 ml water
	2. Amrutottaram kashayam	15 ml	Twice a day, before food	with 45 ml of water
01.10.2015 to 28.10.2015	1. Chandra prabha vati	500 mg	Twice a day, after food	with water
	2. Pancha tikta ghritam	10 ml	Twice a day, before food	with hot water

Table 3: Panchakarma intervention

Duration	Panchakarma procedure
12.05.2015 to 18.05.2015	Udwartanam with Kolakuluthadi choornam & Upanaha sweda at both knee joints with Upanaha choornam
19.05.2015 to 31.05.2015 (Kala vasti schedule)	Sarvanga abhyanga with Dhanwantaram tailam and Bashpa sweda & Ksheera vasti with, (A. Bala Guduchi ksheera paka - 200 ml B. Madhu - 100 ml C. Dhanwantaram tailam - 100 ml D. Maha tiktaka ghritam - 100 ml) (or) Anuvasana vasti with Pippalyadi anuvasana tailam - 100 ml
02.06.2015 to 04.06.2015	Udwartanam with Kolakuluthadi choornam
05.06.2015 to 19.06.2015	Sarvanga abhyanga with Dhanwantaram tailam and Bashpa sweda & Niruha vasti on morning with, (A. Saindhava lavana - 6 gm B. Madhu - 100 ml C. Dhanwantaram tailam - 200 ml D. Satapushpa kalkam - 25 gm E. Dashamoola + Varanadi kwatha - 500 ml F. Maha tiktaka ghritam - 100 ml) (and) Anuvasana vasti on evening with Pippalyadi anuvasana tailam - 100 ml
20.06.2015 to 22.06.2015	Churna pinda sweda with Prabhanjana vimardana tailam
23.06.2015 to 28.10.2015	Udwartanam with Kolakuluthadi choornam (intermittently)

Table 4: Effect of therapy on Arthritis Impact Measurement Scale 2 (AIMS2)

Subscales of AIMS2	Components	BT* score (normalized)	AT** score (normalized)	BT - AT	Percentage of relief
Mobility level (1-5)	Physical	5.96	4.52	1.44	24.1 ↓
Walking & Bending (6-10)					
Hand & Finger function (11-15)					
Arm function (16-20)					
Self-care tasks (21-24)					
Household tasks (25-28)					
Social activity (29-33)	Social interaction	3.5	4.25	- 0.75	21.4 ↓
Support from family & friends (34-37)					
Arthritis pain (38-42)	Pain	10	5.5	4.5	45 ↓
Work (43-47)	Work	NA***	NA	NA	NA
Level of tension (48-52)	Affect	4.75	5	- 0.25	5.26 ↑
Mood (53-57)					

*Before treatment; **After treatment; ***Not applicable; ↓ indicates relief; ↑ indicates worsening

CONCLUSION

The Ayurvedic diagnosis and line of treatment of 'Urustambha' is suitable for chronic rheumatoid arthritis with severe hip joint involvement cases. In present study it was observed that, a chronic case of rheumatoid arthritis with 18 years' history and with bilateral hip involvement, got relief from pain, fever, reduction in stiffness and weakness of thighs, improved range of motion at hip and knee joints and able to do her routine activities with minimum support along with improvement in quality of life. Ayurvedic panchakarma procedures along with internal medicines, seems to provide relief even for the patients who got advised for hip replacement surgery. Further studies are required to substantiate the present study findings.

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