



“An Ayurvedic Management Of Asthimajjagat Vata Vyadhi W.S.R. To Avascular Necrosis Of Femur Head” A Case Study

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Abstract:

Avascular necrosis is the condition where an interruption of sub-chondral blood supply leads to death of cellular component of bone typically at weight bearing joint. Here, we present a case of 30 years old male patient presenting chief complaints of bilateral pain in knee joints with numbness since last 3 month. The pain radiating towards medial aspect of thigh which is associated with stiffness. The patient also complained difficulty in walking, crossing the leg, sitting and squatting positions. This is a known case of Avascular necrosis (AVN). As per Ayurveda, suggest this is a disease of Asthimajjagat Vaat Vyadhi. This patient was initially taken for Panchakarma procedure namely classical Virechan. After classical Virechan, Basti (Anuvasan and Asthapana) and Shamana Chikitsa were given to the patient. Pristha Abhyanga, Katiabhyanga, Avagahana, yoga as well as physiotherapy were subsequently advised to patient. The entire procedure was going on for 8 month. MRI scan of bilateral hip joint after 8 month of follow up, this treatment revealed change in AVN grade from 3rd to 2nd. The range of movement of this joint was also increased significantly. Most of these medicines are Rasayana (immuno modulatory in action). Therefore the present case study strongly suggests that Panchakarma therapy, Rasayan Aushadhi, yoga and physiotherapy bring significant improvement in the treatment of AVN.

Keywords: *Avascular Necrosis, Asthimajjagat Vaat Vyadhi, Basti, Rasayan, Yoga.*

INTRODUCTION

Avascular necrosis(AVN) is incapacitating state that troubles predominantly younger patients in middle of their working lives in the present scenario, it has persisted as damaging disease.¹ Sequels of AVN is pain, long term joint damage and loss of joint function. Morbidity ratio integrated with AVN of hip joint is high with long lasting impairment. Most of the patient affected with prolonged AVN cases need and also demand for one hip replacement during their life span. Post operative morbidity rate is also on peak. Among 2500-3400 cases of AVN of hip joint occupied every year, in which 34.7% were due to corticosteroid abuse, 21.8% due to alcohol consumption and 37.1% due to idiopathic process.² Incidence of glucocorticoid induced AVN is between 3 to 38%³. Osteoarthritis, sclerosis, secondary muscle wasting and non- union fracture are probable ailments in succeeding stages.⁴

Snehayukta Mridu Virechan, frequent application of Basti (enema), Abhyanga (oil Massage) and Seka- pariseka (sprinkle) are mentioned as possible treatment modalities in such conditions.⁵ Thus the approaches that correct the vitiated Dhatu and Doshas will be beneficial in treating such pathologies.

Case Report

A 32 years old male patient, accountant in private sector, reported to our O.P.D. of Panchakarma in Rama Ayurvedic Medical College and Hospital, Mandhana, Kanpur, Uttar Pradesh, with chief complaints stiffness in bilateral hip joint radiating to knee joint since one and half year which was associated with difficulty in doing normal daily activity e.g. walking, taking bath, sitting (squatting position) etc. Aggravating factors were cold weather, gastric upset and supine posture, long sitting and walking. Relieving factors were warm food and warm weather. Patient was asymptomatic before one and half years. Gradually he complained about bilateral pain and stiffness in Hip joint which was excruciating to knee joint. These all consequences came after Corona virus infections. The pain was constant throughout the day and aggravated during the night hours. He consulted a Doctor at his native place Delhi for above complained. Then he was referred to department of Neurology where his pain and stiffness was not reduced by Medicines. Then again he visited to an Orthopedic Consultant, diagnosed his problem as Avascular Necrosis of Bilateral Neck of Femur with the aid of MRI. Then as per advised of Orthopedic surgeon recommended surgical intervention but the patient denied that and he approached to our hospital in OPD of Panchakarma for conservative and better treatment.

Clinical Examination

Prakriti of patient was Kaphaja and Vataja while vikriti was Vataja and Kaphaja; Sar was Rakta; Samhanan and Vyayam Shakti was avar, Jarana Shakti, Abhyavan shakti, Satva, Satmya and Bala were madhyama.

Samprapti Vighatan

Doshas -Vaata and Kapha,

Dushya - Rakta ,Mamsa, Asthi,Sandhi

Srotas - Raktavaha, Mamsavaha, AsthiMajjavaha

Vyadi Adisthana- Sandhi, Tvaka, Mamsa, Sira, Snayu, Kandara.

Jatharagni - Vishamagni

General Physical Examination

G.C. Pathetic,

P.R. 78/min, R.R.-16/min., SPO2- 98%, Chest. Bilateral clear, CVS- S1 S2 normal, no added murmur sound, P/A- Soft and Non Tenderness. CNS- Well oriented.

D.T.R. –Upper limb were normal, knee jerk were diminished

Plantar Reflex- Flexor,

No muscle atrophy.

Investigation Report: MRI grade 3rd AVN with 75-80% involvement of right femoral head. Grade 2nd Avascular Necrosis of Femur Head with 30-50% involvement of left femoral head. Both sacroiliac joint were normal.

R.A.Factor- Negative.

Treatment Protocol

Before starting the shaman Chikitsa, classical Virechana was planned.

Deepan & Pachan with Hingwashthak Churna and Aarogyavardhani vati

Abhyantar Snehapana in Arohan Krama - Yamak Sneha -Panch Tikta Ghrita and Guggulu Tikta Ghrita

Sarvanga Abhyanga with Bala-Lakshadi Taila and Dhanvantaram Tailam

Sarvang Vaspa Swedan- Dashamoola, Erand Patra (Ricinus communis), Nirgundi Patra(Vitex nirgundi) Arka Patra (Calotropis).

Virechan done with Trivruta lehyam and Erand Tailam⁶

Samsarjan Karma for 7 Days

kaal Basti Pattern for - A-N-A-N-A-N-A-N-A-N-A-N-A-A-A-A-(A= Anuvasan Basti, N=Niruha Basti)

Anuvasan Basti

S.NO.	Basti	Quantity
1	Anuvasan basti -Sahacharadi tail and Dhanwantaram Tailam	99ml
2	Asthapana Basti- Dashmooladi niruha Basti(3)	650ml
3	Tiktak Ksheer Basti and Majja Basti	220ml

Asthapana Basti with Dashmooladi

Patra Pinda Sweda & Avagah Swedan (Dashamoola, Erand (Ricinus communis), Nirgundi(Vitex nirgundi) Arka(Calotropis procera) for 45 minutes in alternate pattern-

Medication after completion of Treatment	Dose
Tryodashang Guggulu	2 TID
Panchtikt Ghrit guggulu	2TID
Kaishor Guggulu	2TID
Lakshadi Guggulu	1TID
Sameerpannag Ras	1BD

Assessment Criteria

For assessment of activities, grading from Harris Hip Score, Visual Analogue scale (VAS), Goniometry for range of motion and bone marrow density were adopted to assess the effectiveness of treatment.

Harris Hip Score (Pain Grading)

Grade	Pain
0	None or ignore it
1	Slight, occasional, No compromise in activity
2	Mild pain, no effect on average activities, rarely moderate pain with unusual activity
3	Moderate pain, tolerable but make concession to pain, some limitation of ordinary activity
4	Marked pain, serious limitation of activities
5	Totally disabled, crippled, pain in bed, Bed ridden

Support

Grade	Support
0	None
1	Cane/ walking stick for long walk
2	Cane/ walking stick most of time
3	One crutch
4	Not able to walk

Distance Walked

Grade	Distance Walked
0	Unlimited
1	Six blocks (30minutes)
2	Two- three blocks (10-15 minutes)
3	Indoors only
4	Bed and Chairs only

Limp

Grade	Limp
0	None
1	Slight
2	Moderate
3	Severe or Unable to walk

Stairs

Grade	Stairs
0	Normally without using a railing
1	Normally using a railing
2	In any manner
3	Unable to do stairs

Sitting

Grade	Sitting
0	Comfortably for one hour
1	On a high chair for 30 minutes
2	Unable to sit comfortably on any chair

Outcome of Treatment

Considerable movement was noticed in gait, functional activities & range of motion. Changes in activities indicate decrease in pain. Changes in range of motion and VAS grading are showing the same. Patient started walking for the long distance without support and performing activities like climbing the stairs, sitting on chair for long time which was not present before the treatment. After treatment, very slight limping was present during walk. After follow up there was effective improvement in both hip joint.

Assessment

Assessment	Nature	B.T.	A.T.
Gait	Pain	3	2
	Limp	2	1
	Support	1	0
	Distance Travelled	2	0
Activities	Stairs	1	0
	Shoes, Socks	1	0
	Sitting	2	0

Assessment	Time	Flexion	Extension	Abduction	Adduction	Internal Rotation	External Rotation
Left Limb	B.T.	60	100	400	250	300	300
	A.T.	800	150	450	300	350	400
	Follow up	900	150	450	300	350	400
Right Limb	B.T.	450	50	200	150	200	250
	A.T.	900	100	300	200	300	350
	Follow up	1100	150	400	250	300	350

Parameters	B.T.	A.T.	Follow Up
Stretch test	Positive Bilaterally	Negative Bilaterally	Negative Bilaterally
VAS (Right leg)	9	3	2
(Left leg)	6	0	0

After follow up of this case, MRI of femoral head shows 3rd grade AVN in the right side while grade 2nd in the left side. Both sacroiliac joint were normal. Although, grading of AVN were not changed but bone showed good restoration. There was no complaint of exaggeration condition after follow up.

Discussion

History of Corona virus medicine induced infiltration produced traumatic changes in the hip regions shows involvement of Twak, Mamsa and chronicity of the disease as grade 3rd manifest as involvement upto deeper Dhatu (Meda, Asthi)⁹. In chronicity of this disease, there is increased Vata dosha resulting kshaya of Asthi dhatu. After pacification of Vata with this treatment or when Vata and Rakta are in balanced proportion then steps should be taken to pacify Vata-Rakta. Grade 3rd AVN with H/O prolonged intake corticosteroid infers excessive vitiation of Vata Dosha in body. Therefore Virechan was done by Erand tail and Trivrut leham which helped for srotoshodhana.⁶ Tail also pacifies Vata and milk pacifies Rakta and Pitta vikara. Milk also possesses Sandhaniya Guna¹⁰. Abhyanga carried out before Patrapotali Swedana by virtue of its unctuous quality likely to correct imbalance of Vata dosha. In addition to this, sudation therapy helps in relieving the morbid Kapha dosha as well.¹¹ Sarvang Vasp swedan was planned considering dominance of Vata in association of Kapha.^{12,13} Dhanwantaram tail and Bala lakshadi Tail use is indicated in all Vata diseases.¹⁴ Considering the severity of disease and dominance of Vata dosha, Asthapana Basti of Dashamooladi and Anuvasana Basti with Panchatik Ghrit, Majja Basti, Sahacharadi tail and Dhanwantaram tail was planned successively and given to patient like enema.¹⁵ Anuvasana Basti was given with Ksheer bala tail as it is excellent alleviator of Vata vyadhi.¹⁶ Mostly leaves used in Patrapotali sweda possess Vatahara, Vedanasthapaka, Swedopaga, Deepana and Aam Pachan properties which are beneficial in this disease.¹⁷

Conclusion

The above given treatment has provided better relief in AVN patient with refinement in activities, relaxation in symptoms without side effect within a short period of time. The entire treatment like shaman and Shodhan as well as Sthanika Chikitsa in case of AVN help in controlling the disease progression, providing relief from pain, range of movement etc.

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