

EFFECT OF PANCHATIKAT KSHEER BASTI AND SHAMAN CHIKITSA IN ASTHI MAJJAGATA VATA W.S.R.TO AVASCULAR NECROSIS (AVN) – A CASE STUDY

Shwetal Shivhare* and Dr. Shivani Gavande

*Reader, Department of Kayachikitsa, Pt. Khushilal Sharma Govt. Ayurvedic College,
Bhopal (M.P.) India.

MD Kaychikitsa, PhD, HOD Kaychikitsa Department Parul University Vadodara, Gujarat.

Article Received on
09 May 2024,

Revised on 29 May 2024,
Accepted on 19 June 2024

DOI: 10.20959/wjpr202413-32935



*Corresponding Author

Shwetal Shivhare

Reader, Department of
Kayachikitsa, Pt. Khushilal
Sharma Govt. Ayurvedic
College, Bhopal (M.P.)
India.

ABSTRACT

Background: Avascular necrosis (Avn) of head of the femur is one of the growing condition seen in musculoskeletal clinics. It is basically an osteonecrosis caused due to an injury or any occlusion in the blood vessels nourishing the bone tissue. AVN of femur head is the most common type of necrosis because the artery supplying to that area is very narrow which easily gets injured followed by mere dislocation or a sub capital fracture which leads to lack of nourishment resulting in necrosis. There is no such effective and safe conservative management for AVN in modern medicine. Therefore, our case study proposed to research the better therapeutic Ayurvedic approach for the avn. **Aim:** To assess the efficacy of Panchatikta Kshira Basti (Enema prepared out from Tikta Dravya like Nimba (Azadirachta indica), Patola (Trichosanthes dioica), Vyagri (Solanum surattence), Guduchi (Tinospora cordifolia), Vasa (Adhatodavasica) in the management of

avascular necrosis. The objective of the treatment includes the preservation of structure and function with relief of pain. **Materials & Methods:** The present case study is upon a 31 year old, diagnosed case of avascular necrosis of femoral head with complaints of pain in bilateral hip region since one year which was associated with difficulty in doing normal daily activities such as walking, sitting, squatting along with change in the gait, at the kayachikitsa OPD of pandit khushilalsharma ayurvedic institute Bhopal. The patient was treated with panchatikatsheer Basti along with Panchatikta Guggulu Ghritam and adharang parta pindaswedan (Mahanarayan oil), lakshadi guggul, was given for 21 days. Assessment was

done after Basti and after 15 days of follow up. **Observations:** The therapies provided moderate symptomatic relief from pain, tenderness, general debility and improvement in the gait. **Conclusion:** On the basis of the results obtained it can be concluded that Panchatikta Kshira Basti can be used as effective treatment in the management of Avascular Necrosis.

KEYWORDS: Avascular Necrosis (Avn), Asthi Majjagata Vata, Panchatikat Ksheer Basti.

INTRODUCTION

Avascular necrosis (Avn) of head of the femur is one of the growing condition seen in musculoskeletal clinics. It is basically an osteonecrosis caused due to an injury or any occlusion in the blood vessels nourishing the bone tissue. AVN of femur head is the most common type of necrosis because the artery supplying to that area is very narrow which easily gets injured followed by mere dislocation or a sub capital fracture which leads to lack of nourishment resulting in necrosis. It generally affects people between the age group of 30-50 years and males are more prone to this disease than women.^[1] In Ayurveda, all musculoskeletal diseases are considered under Vatavyadhi. There are degradation of bone tissue and bone marrow in AVN and symptoms of AVN are similar to Lakshanas of Asthi Majjagatavata described by Acharya Charaka, that are Bhedoasthiparvanam (Breaking type of pain), Sandhishool (Hip joint pain), mamskshaya (Muscle wasting of affected joint), Balakshaya (Weakness in affected joint) and Aswapnasantataruk (Insomnia due to pain)^[2] So through Dosh (Vata), Dushya (Majja dhatu /bone marrow) and samprapti (Pathogenesis). AVN can be correlated with AsthiMajjagata Vata. Basti Chikitsa is considered to be half of the treatment of vata dominated disease by Acharayas and considered as Param Aushadh.^[3]

A Case report

A 31 year old male pt, diagnosed case of avascular necrosis of femoral head with complaints of pain in bilateral hip region since 1 year which was associated with difficulty in doing normal daily activities such as walking, sitting, squatting along with change in the gait.

History of present illness: The patient was normal one year back then suddenly pain started in both hip joints then gradually pain radiating to both thighs and difficulty in walking and it became worse with time. The patient had taken allopathic treatment (Analgesic and Anti-inflammatory drugs) but, there was only temporary symptomatic relief later on he had got same complaints again. The patient was not getting much relief with allopathic medicines, so he came to opd of kayachikitsa of pt.khushilal sharma ayurvedic institute bhopal.

Past history: patient had the chronic history of fungal infection. he took the antifungal oral medication with tropical corticosteroids, No history of DM/HTN/Other systemic disorders.

Personal history: Addiction-No, Occupation- OT technician, Appetite- Normal, Sleep-Disturbed (Due to pain in the hip joint), Bowel-Clear, Micturition-Normal.

General examination: Pallor, Icterus, Cyanosis, Clubbing and Oedema absent. The lymph node is not palpable. Vitals were stable. BP-124/80mmHg Pulse-76/min(regular), Temp: 98.4o F RR: 16/min.

Systemic examination

CVA, CNS, RS, P/A are normal.

Musculoskeletal system:- On examination, there was not any external abnormality, a sign of any wasting of muscle, Swelling or any kind of injury.

Investigation

MRI of hip joint:- Dated 24 november 2023

MRI findings are suggestive of grade- 2 avascular necrosis of bilateral hip joint.

Ayurved treatment regimen

This diagnosed case of Avascular necrosis of femoral head admitted in the male general ward of Pt. K.L.S. Govt. Ayurveda Hospital, Bhopal with 2024312 IPD no. and undergo the following procedures.

Treatment	Dosage form	Dose	Duration	Anupan
1. Laksha guggul	vati	2 bd	21 days	Warm water
2. Cap. Panchatikta Ghrita Guggulu	Capsule	2bd	21 days	Warm water
3. Adharang patra pind swedan	Maha Narayan oil	-	21 days	
4. Panchtikta ksheerbasti	As enema	350 ml after light breakfast	21 days	-

Panchatikta ksheer basti schedule

S. no.	Basti	Dose	Retention time
1	N	350 ml	10 min
2	N	350 ml	10min
3	N	350 ml	14 min
4	N	350 ml	18 min
5	N	350 ml	22 min
6	N	350 ml	20 min

7	N	350 ml	34min
8	N	350 ml	22 min
9	N	350 ml	20 min
10	N	350 ml	22 min
11	N	350 ml	20 min
12	N	350 ml	35min
13	N	350 ml	35min
14	N	350 ml	40min
15	N	350 ml	26min
16	N	350 ml	28min
17	N	350 ml	30min
18	N	350 ml	35min
19	N	350 ml	40min
20	N	350 ml	45min
21	N	350 ml	45min

Assessment criteria based on gradation system

Gradation pattern-Assessment will be done based on symptoms of AsthiMajjagata vata before and after treatment.

Parameter	Criteria	Grading	B.T.	A.T.
Pain (vas scale)	(0) No Pain	0		
	(1-3) mild	1		1
	(4-6) Moderate	2		
	2(7-10) severe	3	3	
Gait	Normal gait	0		
	Pain occasionally	1		1
	Walk with support with mild pain	2		
	Walk with support with severe pain	3	3	
	Unable to walk	4		
Sleeplessness	Normal sound sleep	0		
	Sleep disturbed 1-2 times at night	1		1
	Sleep disturbed 3-4 times at night	2	2	
	Difficulty in falling asleep due to pain	3		
	Difficulty in staying asleep due to continuous pain	4		
MRC Muscle Scale	No muscle contraction visible	0		
	A flicker of contraction but no movement	1		
	Movement with gravity eliminated	2		
	The movement against gravity but not against resistance	3	3	
	The movement against gravity and some resistance	4		4
	Normal power	5		

OBSERVATIONS

S. No.	Hip joint movement	Before treatment		After treatment	
		Rt	Lt	Rt	Lt
1	Flexion of hip joint	60	70	80	80
2	Extension of hip joint	10	05	10	10
3	Abduction of hip joint	25	20	40	40
4	Adduction of hip joint	20	15	30	30
5	Medial rotation	25	20	30	30
6	Lateral rotation	30	25	40	40

DISCUSSION

Disruption of blood supply or decreased blood flow to the femoral head is the main pathology in AVN. Ischemia can be resulted from internal (intravascular occlusion due to thrombi or embolic fat., direct cellular toxicity, or altered mesenchymal stem cell differentiation) or external vascular insult typically caused by direct trauma or intraosseous extravascular compression due to lipocyte hypertrophy or Gaucher cells.^[4] However, the exact reason in this case was not clear. The vitiation of *Vata dosha* is due to *Dhatu kshaya* (depletion of these tissues) and *Margavarana* (obstruction in channels). Embolism indicates the vitiation of *Rakta dhatu* (blood tissue) similar to *Grathita raktapitta* (blood disorders related to coagulopathy). *Abhighata* (trauma) is also the root cause of *Vata* and *Rakta* (blood tissue) vitiation and it also leads to the pathology of AVN.

Tiktadi ksheera basti is indicated in *Asthipradoshaja vikaras* (diseases arising in bones), Hence *Panchatiktaka-ksheera-basti* was used. As *Ksheera-basti* is a *Yapana basti* (~enema for maintaining health), it can be used continuously without the use of *Anuvasana basti* and it can impart effects of both *Anuvasana* (Oily enema) and *Niruha* (~evacuating enema) at the same time. This can be used for a longer duration until any complications like edema, fever, etc. are observed. Milk which was part of this Basti is considered as *Jeevaniya* (Life/imparting) and can provide nutrition to the tissues. *Tikta rasa* has the *Upshoshana* (Absorbing/suction) property on *Meda* (Adipose tissues/lipids), *Deepana* (stimulation of digestion), and *Pachana* (Digestion) properties hence it is useful in overweight-related pathogenesis.^[5] The decoction made in Ksheera (Milk) which have Madhura (Sweet) and Snigdha (Unctuous) properties helps to control Vata Dosha and due to Sukshma Guna (Minute properties) of Saindhva (Rock salt) it reaches up to micro channel of the body^[6] and helps to open fresh blood supply to the bone tissue. In this Basti, TiktaDravyas are having Tikta Rasa, Ushana Virya (Hot potency), Madhura and KatuVipaka (Pungent post digestive taste) which favours normal functioning of Dhatvagni (Metabolic stage) facilitating increased

nutrition to the Asthi Dhatu. Ghrita is Vatashamak (pacifier of Vata), Madhura, Shita Virya (cold potency). Thus, it pacifies Vata, improves the Dhatu Upachaya (Metabolism of the tissue) and acts as a rejuvenator of the body. Ghrita has the properties of Sanskarasya Anuvartana^[7] (that which inherits the properties of other drugs without altering itself) precipitating bioavailability of other drugs.

Laksha guggulu is a herbal drug and it contains Lakh (Ficus Religiosa), Asthisrankhala (Cissus Quadrangularis), Arjuna (Terminalia Arjuna), Ashwagandha (Withania Somnifera), Nagbala (Greuria Hirsuata), Guggulu (Commifora Mukul).¹¹ Most of these drugs have properties like Kashaya-Tikta-Madhur ras, Ushna virya, Laghusnigdha guna, Vatakapashamak, Deepan, Balya, Rasayana, Pachana, Sothaghana, Vedanashamaka.^[8] These collective properties of ingredients are Anti-inflammatory^[9] Analgesic^[10] Antibacterial, Fibrinolytic, Fracture healing¹⁴ Hypolipidemic and Cytoprotective etc. Tikta- Kashaya ras of the compound also improves Asthya-agni (Metabolism of bone) and does the purification of microchannels of bone.

In Nirgundi Patra pinda sweda, Nirgundi and Tila taila were used. Nirgundi had Kapha-Vata Shamaka, Rasayana, analgesic and anti-inflammatory properties. Patra pinda sweda was applied to the affected part of the body, which was Sandhichestakara, Srotosuddhikara, Agnideepaka, and Kapha-Vatanirodhana, it decreased the Stambha. It released pain, relaxed the muscles, activated the local metabolic process, increased local blood flow, and thus increased the absorption of Sneha through the skin. After administration of Swedana, it might produce a hypoanalgesic effect by diverted stimuli.^[11]

CONCLUSION

On the basis of this case study it can be concluded that Panchatikta Kshira Basti along with certain palliative medicine are effective in the management of asthi-majjagatvat wsr to avascular necrosis.

REFERENCE

1. Kumar Parveen, Clark Michael, Kumar & Clark's Clinical Medicine, 2017; 9, 19: 715.
2. Acharya YT, editor, Shri Chakrapanidatta, commentator, Agnivesha, Charka Samhita, Chikitsasthana; Vatavyadhichikitsa Adhyaya, Chaukhamba Surbharati Prakashan, Varanasi, 2014; 617, 10: 28-33.

3. Vagbhata, ASTANGAHRADAYA, with commentaries, Sarvangasundara of Arunadatta & Ayurvedarasayana of Hemadri, Edited by Pt. Hari Sadasiva Sastri Paradakara, Reprint: Sutrasthana, Chapter No.1, Ayushkamiya Shlok no, 2010; 16: 26.
4. J. Moya-Angeler, A.L. Gianakos, J.C. Villa, A. Ni, J.M. Lane Current concepts on osteonecrosis of the femoral head World J Orthoped, 2015; 6(8): 590-601, 10.5312/wjo.v6.i8.590 View at publisher View in ScopusGoogle Scholar
5. Pandey G. (editor) Charaka *Samhita of Agnivesa-Ist volume* Varanasi: Chaukumba Sanskrit Sansthan, 2006. Google Scholar
6. Patil, Vasant. Principles & Practice of Panchakarma (A Comprehensive Book For UG, PG, Researchers & Practitioners); New Delhi: Chaukhamba Publication, 2014; 4: 497.
7. Ibidem Carakasamhita Snehaadhyaya Adhyaya, Sutrasthana, 5: 13-13, 82.
8. Ambikadatta Shashtri, Bhaishajya Ratnavali, (Kanjiv lochan Eng. Translation) Chap. reprinted. Chaukhambha Sanskrita Sansthan, Varanasi, 2009; 775: 49-14.
9. Sharma JN, Comparison of the Anti-Inflammatory Activity of Commiphora Mukul (An indigenous drug) with those of Phenylbutazone and Ibuprofen in experimental arthritis induced by Mycobacterial Adjuvant. *Arzneimittelforschung*, 1977; 27: 1455– 1457.
10. Singh SP, Mishra N, Dixit KS, Singh N, Kohli RP: An experimentally study of analgesic activity of *Cissus quadrangularis*. *Indian J of Pharmacol*, 1984; 79: 162- 163.
11. Pandya Dilip., Professor, editor. Vagbhatta, Ashtanga Hridaya, Sutrasthana, Dinacharya Adhyay. Ahmedabad: Saraswati Pustak Bhandar, 1992; 49, 1: 8-2. [Google Scholar