

## AYURVEDIC MANAGEMENT OF AVASCULAR NECROSIS OF THE FEMORAL HEAD: A CASE REPORT

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### ABSTRACT

Avascular necrosis (AVN) of bone is a disorder in which bone tissue dies due to lack of blood supply, leading to structural damage of the bone. It is also known as osteonecrosis or ischemic necrosis. This condition is commonly observed in patients with a history of excessive alcohol consumption and prolonged use of high-dose steroid medications. In the early stage the disease may remain painless, but as it progresses the pain gradually increases and interferes with the patient's daily activities and overall quality of life. AVN is considered one of the most difficult conditions to manage in orthopaedics. The currently available treatment options in modern medicine are often not completely satisfactory. The patient was treated comprehensively with Ayurvedic oral medications and Panchakarma procedures including Panchatikta Ksheer Basti, Jalaukavacharana (leech therapy). In Ayurveda, AVN of the

femoral head can be correlated with Asthi-Majjagata Vata due to the similarity in clinical features. Significant improvement was observed in pain relief, joint mobility, and overall quality of life. The findings suggest that AVN of the femoral head can be effectively managed with Panchakarma therapy, Shamana Chikitsa and exercises.

**KEYWORDS:** *Avascular necrosis (AVN), Asthi-Majjagata Vata, Panchakarma, Panchatikta Ksheer Basti, Jalaukavacharana.*

## INTRODUCTION

Avascular necrosis (AVN) is a pathological condition in which bone tissue dies due to interruption of blood supply. It is also known as osteonecrosis or ischemic bone disease.<sup>[1]</sup> AVN of the femoral head is the most common form of this disorder. The blood vessels supplying the femoral head are very small and delicate; therefore, this area is highly vulnerable to injury. Trauma such as dislocation of the hip joint or subcapital fracture of the femur (fracture near the head of femur) may disturb the blood circulation and lead to necrosis of the bone. AVN may also occur due to trauma, obstruction of blood vessels, prolonged steroid therapy, or excessive alcohol consumption. It is commonly seen in individuals between 30 and 50 years of age and most frequently involves the head of the femur.

In the early stage of the disease, patients may experience mild pain around the hip joint or may remain asymptomatic. As the disease progresses, severe pain develops in the hip, buttock, groin, and thigh region, along with restriction of movements of the hip joint. The main aim of treatment is to prevent further damage to the bone and maintain joint function. In many cases, the final treatment option is surgical intervention. Moreover, available treatments are often expensive and the prognosis remains uncertain. Therefore, the present case study focuses on the conservative management of Avascular Necrosis of the femoral head.

In Ayurveda, AVN of the femoral head can be correlated with Asthi-Majjagata Vata based on similarity of signs and symptoms. The classical symptoms described include Bhedoasthiparvanam (splitting or breaking type of pain in bones and joints), Sandhishoola (joint pain), Mamsakshaya (muscle wasting), Balakshaya (general weakness), Sandhi Shaithilya (laxity of joints), Aswapna Santata Ruk (disturbed sleep due to persistent pain), and Asthi Daurbalya (weakness and degeneration of bone tissue).<sup>[2]</sup>

## CASE REPORT

A 28-year-old female patient visited the OPD of Panchakarma Department at Govt. Dhanvantari Ayurved College and Hospital on 23/12/2025 with the following complaints:

Patient Name: XYZ    OPD/IPD No.: 1XXX22    Age/Sex: 28 Years / Female

### Chief Complaints

\* Pain in both hip joints radiating to both lower limbs for the last 1 year

\* Difficulty in walking and standing for a long duration since 2 months

### Personal History

Bowel: Normal | Bladder: Normal | Appetite: Normal | Sleep: Altered |

Built: Normal

There was no history of hypertension, diabetes mellitus, corticosteroid use, alcohol consumption, or trauma. No relevant family history was reported.

### Systemic Examination

CNS: Well oriented to person, place and time.

CVS: S1, S2 audible; no murmur.

Respiratory System: No obvious deformity; B/L clear chest; no added sound present.

Digestive System: Good appetite and bowel movement normal.

Uro-genital System: No urinary and genital complaints.

### Ashta Vidha Pariksha

S.No.	Parameter	Findings
1.	Nadi (Pulse)	78/min
2.	Mala (Stool)	Prakrut (Normal)
3.	Mutra (Urine)	Prakrut (Normal)
4.	Jihva (Tongue)	Prakrut (Normal)
5.	Kshudha (Appetite)	Prakrut (Normal)
6.	Shabda (Speech)	Prakrut (Normal)
7.	Sparsha (Skin)	Prakrut (Normal)
8.	Druk (Eyes)	Prakrut (Normal)
9.	Akruti (Built)	Madhyam
10.	Bala (Strength)	Madhyam
11.	Raktadab (BP)	110/70 mmHg

### Investigations

An MRI of the bilateral hip joints and lumbar spine conducted on 21st December 2024 revealed the following significant findings:

Finding	Details
Right Hip Joint	AVN – Grade III/IV
Left Hip Joint	AVN – Grade II/III
Lumbar Vertebrae (L4–L5)	Diffuse hemopoietic marrow reconversion in the vertebral bodies

**MATERIAL AND METHOD**

Study Type: Simple Random Single Case Study.

**1. Internal Medications (Shamana Aushadha)**

Date	S. No.	Drug	Dose & Duration	Anupan
23/12/25	1.	Sanjeevani Vati 125 mg Tapyadi Loha 250 mg Madhumalini Vasant 250 mg Manjishtha Churna 2 gm Daruharidra Churna 2 gm	1 BD	Lukewarm water
	2.	Panchatikta Ghrita Guggulu	2 tab BD	Lukewarm water
	3.	Kaishore Guggulu	2 tab BD	Lukewarm water
	4.	Manjishthadi Kwath	40 ml BD	Lukewarm water
	5.	Mahavishgarbha Taila	Local application	
09/01/2026	1.	Sanjeevani Vati 125 mg Tapyadi Loha 250 mg Madhumalini Vasant 250 mg Manjishtha Churna 2 gm Daruharidra Churna 2 gm	1 BD	Lukewarm water
	2.	Panchatikta Ghrita Guggulu	2 tab BD	Lukewarm water
	3.	Kaishore Guggulu	2 tab BD	Lukewarm water
	4.	Manjishthadi Kwath	40 ml BD	Lukewarm water
	5.	Mahavishgarbha Taila	Local application	
05/02/2026	1.	Praval Panchamrut Ras 250 mg Tapyadi Loha 250 mg Madhumalini Vasant Ras 250 mg Daruharidra Churna 2 gm Manjishtha Churna 2 gm	1 BD	Lukewarm water
	2.	Panchatikta Ghrita Guggulu	2 tab BD	Lukewarm water
	3.	Kaishore Guggulu	2 tab BD	Lukewarm water
	4.	Manjishthadi Kwath	40 ml BD	Lukewarm water
	5.	Mahavishgarbha Taila	Local application	
26/02/2026	1.	Praval Panchamrut Ras 250 mg Tapyadi Loha 250 mg Madhumalini Vasant Ras 250 mg Daruharidra Churna 2 gm Manjishtha Churna 2 gm	1 BD	Lukewarm water

	2.	Panchatikta Ghrita Guggulu	2 tab BD	Lukewarm water
	3.	Kaishore Guggulu	2 tab BD	Lukewarm water
	4.	Manjishthadi kwath	40 ml BD	Lukewarm water
	5.	Mahavishgarbha Taila	Local application	

## 2. Panchakarma Procedures

### Panchatikta Ksheer Basti (Medicated Milk Enema)

To make Panchatikta Ksheer Basti, take 25 grams of Panchatikta drug. Add 400 ml of water to it and heat it and reduce it to 100 ml. Then add 100 ml of milk and boil it again until it reduces to 100 ml. Then add 20 ml of mahasneha.

### 3. Jalaukavacharana (Leech Therapy)

#### DISCUSSION

Avascular necrosis (AVN) is the death of bone tissue due to interruption of blood supply. In the early stage, the disease may not show any symptoms, but in later stages it affects the bone and surrounding structures. The etiology of AVN can be traumatic or non-traumatic. In non-traumatic cases, AVN occurs due to obstruction of blood flow caused by intravascular blockage or external compression of blood vessels supplying the femoral head, leading to reduced blood supply and bone damage. In the present case, there was no history of trauma or any other factors that could reduce bone strength or composition.

Since the condition involves Vata and Rakta, treatment was planned with Basti therapy. Panchatikta Ksheera Basti is effective in Asthigata and Majjagata Rogas. Properties of Panchatikta Gana drugs are: Rasa – Predominant Tikta; Anu Rasa – Katu or Kashaya; Vipaka – Katu; except Guduchi (Madhur Vipaka); Guna – Ruksha, Laghu.<sup>[3]</sup> Ksheera has Snigdha and Madura properties which further bring about Shamana of Vata Dosha. Tikta Rasa has affinity towards Asthi Dhatu after assimilation in the body due to Akasha and Vayu Mahabhuta. Ksheera and Tikta Dravyas when used together in the form of Ksheera Basti will act on the site of lesion in Sandhigatavata, i.e., joints, and will be in a position to break down the chain of reactions occurring in the form of Samprapti on the one hand, and arrest the progress of the disease on the other hand, in addition to producing subjective improvement in patients.

Jalaukavacharana (Leech Therapy) was applied locally to the affected hip joints. Leech therapy is a validated Raktamokshana (bloodletting) procedure that promotes local blood circulation, reduces inflammatory mediators, and relieves Vata-Rakta-Pitta vitiation contributing to joint pathology. It is particularly indicated in conditions with vascular insufficiency, as in AVN.

**Table: Drugs and their Ayurvedic Mode of Action.**

S.No.	Drug	Ayurvedic Mode of Action
1.	Sanjeevani Vati <sup>[4]</sup>	Deepana, Pachana and Ama-nashaka; balances Vata and Kapha; improves Agni and helps in Srotosodhana.
2.	Tapyadi Loha <sup>[5]</sup>	Raktavardhaka, Pittashamaka; improves Dhtvagni and nourishes Dhatus.
3.	Madhumalini Vasant Ras <sup>[6]</sup>	Rasayana and Balya; pacifies Pitta and Kapha; enhances immunity and strengthens Dhatus.
4.	Manjishtha Churna	Rakta-shodhaka; Pitta-Kaphashamaka; reduces Shotha and purifies blood.
5.	Daruharidra Churna	Kapha-Pittashamaka; Rakta-shodhaka; Shothahara and Vranarohana.
6.	Panchatikta Ghrita Guggulu <sup>[7]</sup>	Vata-Pittashamaka; Asthi-Majja Dhatu poshaka; Shothahara and useful in Sandhi-roga.
7.	Kaishore Guggulu <sup>[8]</sup>	Rakta-shodhaka; Ama-pachaka; Vata-Pittashamaka; reduces inflammation.
8.	Manjishthadi Kwath <sup>[9]</sup>	Rakta-shodhaka; Pitta-Kaphashamaka; Shothahara and improves circulation.
9.	Mahavishgarbha Taila <sup>[10]</sup>	Vatashamaka; Vedanasthapana; reduces stiffness and provides Snigdha effect to joints.
10.	Praval Panchamrut Ras <sup>[11]</sup>	Pittashamaka; Rasayana; strengthens Dhatus and improves Agni.

## CONCLUSION

Avascular necrosis of the femoral head is a progressive condition in which joint replacement is often considered the main treatment in advanced stages, but it carries certain risks and higher cost. In this case, a patient of Stage II and III AVN of the femoral head showed significant improvement with Ayurvedic management, including Panchakarma procedures and oral Ayurvedic medications. The patient experienced reduction in pain, improvement in range of movement, and better quality of life, indicating the beneficial role of Ayurvedic treatment in the management of avascular necrosis.

Ayurvedic therapy may also be a cost-effective alternative compared to conventional surgical interventions. Panchakarma procedures and herbal medications are generally less expensive than surgical treatments and long-term pharmaceutical therapy, making them more accessible to a wider population. In addition, Ayurveda emphasizes lifestyle modifications such as proper diet and regular exercise, which further contribute to improved health outcomes. At present, the patient is under regular follow-up and continues to maintain improvement in symptoms without progression of the disease.

## REFERENCES

1. "Avascular necrosis." Synonyms.com. STANDS4 LLC, 2020. Web. 24 Mar. 2020. <Avascular Necrosis Synonyms & Antonyms | Synonyms.com>
2. Acharya YT, editor, Shri Chakrapanidatta, commentator, Agnivesha, Charka Samhita, Chikitsasthana; Vatavyadhichikitsa Adhyaya, 28/33, Chaukhamba Surbharati Prakashan, Varanasi, 2014; 617.
3. Kavita BS, Santosh L, Yadahalli A. A Clinical Study To Understand And Evaluate The Effect Of Panchatikta Ksheera Basti In The Prevention And Management Of Jarajanya Asthikshaya W.S.R. To Osteoporosis. IAMJ. November, 2018; 6(11): 2460-2465.
4. Bhaisajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Jwararogadhikar, Page: 178, Shloka: 1009-1011.
5. Vagbhata, Ashtanga Hridaya, edited by Prof. K. R. Srikantha Murthy, Volume II, Nidana, Chikitsa Kalpa & Siddhi Sthana, Pandurogashophavisarpanidanam, 13/3, p.200, Chaukhambha Krishnadas Academy, Varanasi, 2008.
6. Rasa tantra sara va siddha prayoga samgraha, Prathama Khanda Kharleeya Rasayana, 12th edition 1980, published by Krishna Gopala Ayurveda Bhavan, pg. 367.
7. Bhaisajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Kustharogadhikar, Page: 882, Shloka: 228-231.
8. Bhaisajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Vataraktadhikar, Page: 582, Shloka: 104-113.
9. Bhaisajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Kustharogadhikar, Page: 866, Shloka: 64-65.

10. Bhasajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Vatavyadhirogadhikar, Page: 569, Shloka: 561-571.
11. Bhasajyaratnavali of Kaviraj Govind Das Sen, Edited with 'Siddhiprada' Hindi Commentary by Prof. Siddhi Nandan Mishra, Year: 2005, Gulmairogadhikar, Page: 658-659, Shloka: 113-117.