Case Study

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A CASE STUDY ON THE AYURVEDIC MANAGEMENT OF ASTHI-MAJJAGATA VATA WITH SPECIAL REFERENCE TO AVASCULAR NECROSIS

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ABSTRACT

Introduction: The Vata dosha becomes vitiated and localizes in the Asthi (Bone) and Majja (Marrow) dhatus in the Ayurvedic disease known as Asthi-majjagata Vata. It is considered a Vatavyadhi and a long-lasting, deeply rooted condition. As a result, when Vata is disturbed, it typically concentrates in the Asthi (Bone) and Majja (Marrow), resulting in symptoms like Majja shosha (marrow wasting), Asthi bheda (bone-breaking pain), Sandhi shoola (joint pain), Stambha (Stiffness), Gurugatratva (Heaviness of the body). Avascular necrosis of the Hip, also known as osteonecrosis, is a condition in which the blood supply to the bone is cut off, leading to bone cell death and potential collapse. Younger people are often affected by AVN, a major concern in India, particularly of the femoral head. Aim: To study the efficacy of Ayurvedic treatment in the management of Asthi-majja gata Vata. Material and method: A 24-year-old male came with complaints of pain in the Waist region, stiffness in the lower back region and difficulty in walking. In this case study, treatment for Asthi-majja gata Vata follows Samprapti vighatan chikitsa, which comprises Shaman chikitsa, Shodhana chikitsa (Tikta Ksheer basti). Observation and result: In the effect of therapy, relief was observed in Sandhi shoola (joint pain), Stambha (Stiffness), Gurugatratva (Heaviness of the body). Moderate improvement was observed. Conclusion: Hence, through this article, we will get complete knowledge of the Diagnosis, Symptoms, and Treatment of Asthi-majja gata Vata Roga (Avascular necrosis), which gives a clear view of this disease, that is beneficial to people.

Keywords: Ayurveda, Vatavyadhi, Asthi-majja gata Vata, Avascular necrosis, Tikta Ksheer Basti.

INTRODUCTION

Asthimajjagata Vata is a condition described in Ayurveda where Vata dosha gets vitiated and localizes in the Asthi (Bone) and Majja (Bone marrow) dhatus.[1] It is a Vata-vyadhi (Neuromuscular disorder) and is considered a chronic, deep-seated condition.

When vitiated Vata is located in Asthi and Majja it leads to splitting pain of bones and joints, arthralgia, loss of muscle strength, insomnia and continuous pain.[2]

Asthi-Majjagata Vata a neuromusculoskeletal disorder called Vata can cause marrow wasting, joint pain, and bone-breaking pain, among other symptoms. Bheda, Shosha (Dryness), and Sankocha (Constriction) are among the symptoms that it causes in Asthi and Majja. Degenerative conditions are frequently linked to the syndrome.[3] Vata vyadhi and Asthi-Majja dhatu participation are described indirectly in the Ashtanga Hridaya.[4] According to the Madhava Nidana, degeneration brought on by Vata occurs gradually.[5] A lack of blood supply causes bone tissue to die in a condition called avascular necrosis (AVN), often referred to as osteonecrosis. This condition results in fractures, joint collapse, and bone loss. It is most common in the weight-bearing joints of the hip, knee, and shoulder. The condition causes weakening, necrosis, and loss of bone cells over time. The surface of a joint may collapse if it is close by, resulting in discomfort and decreased functionality.[6]

Avascular necrosis (AVN) is becoming more common in India, particularly in younger individuals and those with hip joint issues. AVN causes bone tissue loss as a result of reduced blood supply. Risk factors include the use of corticosteroids, alcohol abuse, trauma, autoimmune diseases, and sickle cell disease. Ayurveda offers a conservative approach to management, emphasizing therapies like Shaman Aushadh and Basti.[7] Early diagnosis is crucial to prevent effects like hip joint collapse and subsequent osteoarthritis.

CASE REPORT

A 24-year-old male patient visited the Kayachikitsa OPD of Ayurvedic Hospital of Shri Khudadad Dungaji Government Ayurveda Hospital, Raipur, with the following details,

Date of consultation - 29/5/2025
Age - 24 year
Sex - Male
Religion - Hindu
Marital Status - Unmarried
Socio-Economic Status - Middle Class
Address - Raipur (Chhattisgarh)
Occupation - Student
Type of Living - Joint family
Habitation - Urban

Chief Complaints: Pain in the Waist region for 7 days.

Associated Complaints: In addition, he complained of lower back discomfort and problems with walking, which were linked to decreased appetite, gaseous distension of the abdomen, constipation, and general weakness.

History of Present Illness: A 24-year-old male patient complained of seven days of waist pain when he arrived at the Kayachikitsa OPD of the Shri Khudadad Dungaji Govt. Ayurvedic Hospital in Raipur, Chhattisgarh. Additionally, he complained of lower back discomfort and trouble walking. General weakness, constipation, gaseous distension of the abdomen, and decreased appetite were all linked to these symptoms. Symptomatic allopathic treatment was used to treat it. He thereafter experienced pelvic pain, which grew worse over time. He gradually had lower back pain, left leg tingling, heaviness, and trouble walking.

Past History: He has neither a traumatic nor any other past medical or surgical history. Due to Severe Pain, he consulted a doctor and was advised to take analgesics for pain management.

Family History: There was no history of diabetes, hypertension, or any other illness among the family members.

Personal History
Diet - Mixed
Appetite - Poor
Bowel Habit - Irregular (Frequency - Twice a day)
Urine Habit - Regular (5-6 times a day and 0-1 time at night)
Frequency - Normal
Burning micturition - Absent
Painful Micturition - Absent
Habit - Tea
Sleep - Samyak
Koshtha - Madhyam
Physical exercise - No Exercise

General Examination
BP - 120/80 mmHg.
Pulse rate - 70/min.
Temp - 98.6^0 F
Height - 5 Feet 7 Inches
Weight - 48 kg
Pallor - Absent
BMI - 1428 calories/day
BMR - 16.6 kg/m^2

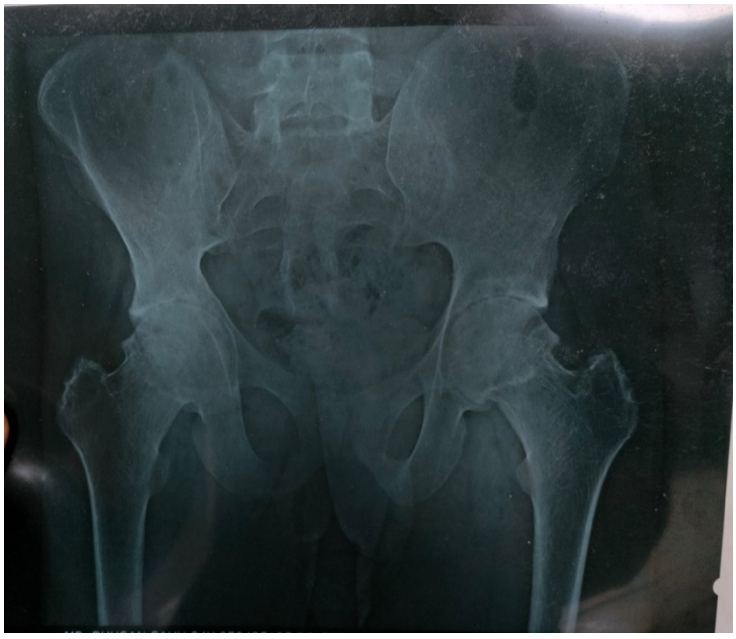
Astavidha Pariksha[8]
Nadi (Pulse) - VK
Mutra (Urine) - Normal (5-6 times a day and 0-1 time at night)
Mala (Stool) - Malbaddhata
Jihva (Tongue) - Clear/Alipta
Shabda (voice) - Prakrit
Sparsh (Skin) - Sheet
Drika (Eye) - Samanya
Akriti (General Appearance) - Krisha

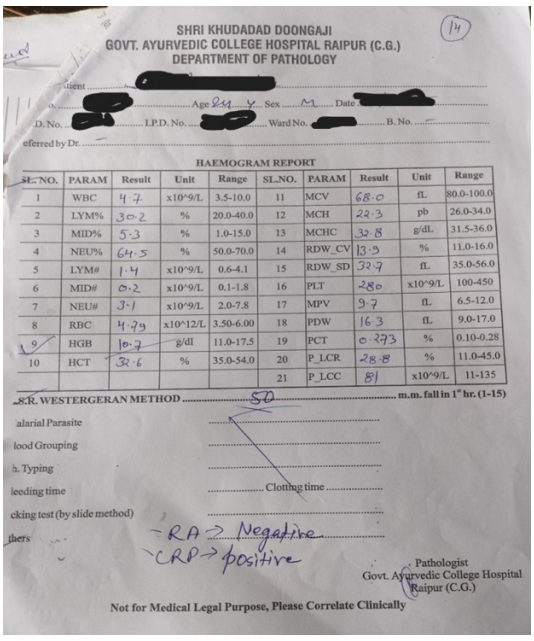
Local Examination
Inspection - Visible Deformity
Palpation - Tenderness in the Pelvic Region
Posture - Defective Posture
Swelling (Shotha) - No
Muscle Wasting - Yes

Investigations

Table 1: Investigations

Investigation	Report
Hb	10.7
ESR	50
RA Factor	Negative
C-Reactive Protein	Positive
X-Ray (Digital) Hip Joint	Avascular necrosis of the Femoral head





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HAEMOGRAM REPORT

SL.NO.	PARAM	Result	Unit	Range	SL.NO.	PARAM	Result	Unit	Range
1	WBC	4.7	x10^9/L	3.5-10.0	11	MCV	68.0	fL	80.0-100.0
2	LYM%	30.2	%	20.0-40.0	12	MCH	22.3	pb	26.0-34.0
3	MID%	5.3	%	1.0-15.0	13	MCHC	32.8	g/dL	31.5-36.0
4	NEU%	64.5	%	50.0-70.0	14	RDW_CV	13.3	%	11.0-16.0
5	LYM#	1.4	x10^9/L	0.6-4.1	15	RDW_SD	32.7	fL	35.0-56.0
6	MID#	0.2	x10^9/L	0.1-1.8	16	PLT	280	x10^9/L	100-450
7	NEU#	3.1	x10^9/L	2.0-7.8	17	MPV	9.7	fL	6.5-12.0
8	RBC	4.79	x10^12/L	3.50-6.00	18	PDW	16.3	fL	9.0-17.0
9	HGB	10.7	g/dl	11.0-17.5	19	PCT	0.273	%	0.10-0.28
10	HCT	32.6	%	35.0-54.0	20	P_LCR	28.8	%	11.0-45.0
					21	P_LCC	81	x10^9/L	11-135

ESR. WESTERGERAN METHOD ..... 50 ..... m.m. fall in 1st hr. (1-15)
Malarial Parasite .....
Blood Grouping .....
Rh. Typing .....
Bleeding time ..... Clotting time .....
Packing test (by slide method) .....
Others ..... RA → Negative
CRP → positive

Pathologist
Govt. Ayurvedic College Hospital
Raipur (C.G.)

Not for Medical Legal Purpose, Please Correlate Clinically

Criteria of Assessment

Subjective Parameters[9]

Table 2: Pain in the Hip Joint and Groin region

Symptoms	Grade	Score BT	Score AT
No Pain	0		
Slight pain only on hard work	I		**I**
Pain on movement but without disturbing routine work	II		
Pain on movement disturbs routine work	III		
Severe pain compels patients to lie in bed	IV	**IV**	

BT: Before Treatment, AT: After Treatment

Table 3: Restricted Movement of the Hip Joint

Symptoms	Grade	Score BT	Score AT
No Restriction (Flexion of 130^0)	0		
Restricted initially (Flexion of 90^0-130^0)	I		
Restricted Partially (Flexion of 70^0-90^0)	II		**II**
Restricted with pain (Flexion of 45^0-70^0)	III	**III**	
No Joint movement (Flexion of 0^0-45^0)	IV		

BT: Before Treatment, AT: After Treatment

Table 4: Stiffness of Hip Joint

Symptoms	Grade	Score BT	Score AT
No Stiffness	0		
Sometimes for 5-10 min.	I		**I**
Daily for 10 - 30 min.	II	**II**	
Daily for 30 - 60 min.	III		
Daily More than one hour.	IV		

BT: Before Treatment, AT: After Treatment

Table 5: Limping Gait

Symptoms	Grade	Score BT	Score AT
Normal Without Pain	0		
Occasional Pain during walking	I		
Mild Pain on walking with support	II		**II**
Severe pain on walking	III	**III**	
Unable to walk	IV		

BT: Before Treatment, AT: After Treatment

Treatment Plan

Table 6: Shaman Chikitsa

No.	Drugs	Dose	Duration	Anupan
1.	Vrihat Vata Chintamani Ras Ekangveer Ras Kamdudha Ras Ashwagandha Churna	250 mg 250 mg 250 mg 3 gm	2 months	Ushnodak
2.	Dashmoolarishta	30 ml. twice	2 months	With the same amount of Water
3.	Panchamrit Lauh Guggul	2 vati twice	2 months	-
4.	Panchasakar Churna	5 gm at Night	15 Days	Ushnodak

Table 7: Shodhan Chikitsa

Procedure	Ingredients	Duration
Tikta Ksheer Basti[10]	(Dashmoola, Guduchi, Nimba, Patola, Ghrit, Madhu, Dugdha)	15 Days
Patra Pinda Sweda[11]	Nirgundi Patra, Eranda Patra, Chincha Patra, Shigru Patra, Datura Patra, Arka Patra, Rasna Churna, Shatapushpa Churna, Devadaru Churna, Saindhava Lavan	1 Month

Note

- Tikta Ksheer Basti was used for 15 days, with the same duration of Parihaar Kala[12] (Recovery period).
- This Complete study is carried out as per International Conference of Harmonization-Good Clinical Practices Guidelines (ICH-GCP) as per the Declaration of Helsinki.

OBSERVATION AND RESULT

Table 8: Subjective parameters

Subjective Parameters	BT	AT	Duration
Ruk (Pain in Hip Joint and Groin region)	4+	1+	2 Months
Restricted range of motion of Hip Joint	3+	2+	2 Months
Stambha (Stiffness of Hip Joint)	2+	1+	2 Months
Spandan (Tingling Sensation)	2+	0	2 Months
Gait (Limping gait)	3+	2+	2 Months

BT: Before Treatment, AT: After Treatment

Table 9: Objective parameters

Objective Parameters	BT	AT	Duration
Abduction			2 Months
I. Right leg	15°	20°	
II. Left leg	30°	35°	
Adduction			2 Months
I. Right leg	10°	15°	
II. Left leg	15°	20°	
Flexion			2 Months
I. Right leg	60°	80°	
II. Left leg	90°	100°	
Extension			2 Months
I. Right leg	15°	20°	
II. Left leg	20°	25°	
Internal Rotation			2 Months
I. Right leg	15°	20°	
II. Left leg	20°	30°	
External Rotation			2 Months
I. Right leg	20°	30°	
II. Left leg	30°	40°	

BT: Before Treatment, AT: After Treatment

In the effect of therapy on cardinal symptoms, relief was observed in pain, stiffness, and restriction of Movement. Improvement observed in associated symptoms, such as General weakness also remained highly significant. Due to Vatahara Treatment, patient was feeling relief and able to do her daily work. When considering the treatment's overall impact, a moderate improvement was noted.

DISCUSSION

As we know “Samprapti Vighatan chikitsa”. As per Samprapti, Vata vitiation is brought on by Nidan-sewan with Dhatu-kshaya (depletion of tissues) and srotorodha (obstruction in bodily channels). causes Sankocha (contraction/stiffness), Shosha (emaciation), and Ruk (pain).

Shaman Chikitsa

Dashamoolarishta

It emphasizes the Shothahara, which lessens inflammatory edema in the bone marrow and joints, and the Vata Shamana, which lessens joint pain, stiffness, and numbness. The Srotoshodhana helps reverse early-stage AVN by enhancing microcirculation and nutrient delivery to bone tissue. By nourishing exhausted tissues, the Dhatu Poshana slows bone deterioration and aids in tissue healing. The Agnidipana and Amapachana promote the absorption of nutrients for bone rebuilding by improving digestion and eliminating metabolic pollutants. [13]

Panchamrit Lauh Guggul

With its Anti-inflammatory and Vata-hara qualities, guggul is a potent herb that works as a Yogavahi to carry medications deeper into the dhatus. It lessens stiffness and discomfort by enhancing tissue oxygenation, nerve function, and bone marrow health. It slows the breakdown of bones by strengthening the bone matrix and encouraging the growth of healthy tissue. By increasing metabolism and removing srotas, guggul improves microcirculation and stops more ischemia. Additionally, it has an analgesic and anti-inflammatory impact that reduces swelling, joint pain, and mobility restriction. Additionally, it lowers chronic inflammatory indicators and regulates immunological responses, halting the progression of AVN brought on by corticosteroids or autoimmune diseases. [14]

Panchasakar Churna

Panchasakar Churna possesses strong Vatanulomana, Ama pachana, and Vata-Kapha hara qualities. In addition to treating constipation, distension of the abdomen, and slow digestion, it also aids in the treatment of Vata-related conditions such as Avascular Necrosis (AVN). By eliminating metabolic pollutants, lowering metabolic load, and reestablishing microcirculation, it promotes digestion. It reduces discomfort and spasms by regulating colonic Vata, which also soothes systemic Vata. Additionally, it helps the body get ready for Rasayana treatments by providing mild rechana, a laxative, for gut detoxification. Additionally, it enhances microcirculation and removes physical impediments, which is beneficial in situations like early-stage AVN. As a preliminary medicine, it improves the effectiveness of Rasayana chikitsa, Purvakarma, and Basti chikitsa. [15]

Shodhan Chikitsa

Tail is supposed to be the best for Vatavyadhi as Vata is Ruksha, Sheeta, Laghu, and Khara and Tail has just opposite qualities. I used Tikta Ksheer Basti. Tikta Ksheer Basti is the preferentially best line of treatment in Asthi-Majja gata Vata, and is very effective. Hence, it can slow down the degenerative process occurring in different Dhatus.

Mode of Action of Tikta Ksheer Basti

Vata-pacifying - Tikta Dravyas processed in milk calm aggravated Vata, which is the primary cause of degeneration in AVN.

Asthi and Majja Dhatu Pushti - Asthi and Majja's regeneration is nurtured and supported by Tikta dravyas. Milk serves as both a dhatu-Poshak and a carrier.

Brings Sneha (unctuousness) - Counters the rukshata (dryness) of Vata. Improves joint lubrication and reduces friction in degenerated joints.

Local and Systemic action - Basti, administered rectally, has a systemic effect on the Pelvic–vertebral–femoral axis, directly influencing the hip joint (a common site of AVN).

Improves circulation - Enhances microcirculation to Asthi and Majja, which is compromised in AVN, thereby preventing further necrosis.

Rasayana effect - Certain Tikta dravyas like Guduchi, Patola, Nimba used in Tikta Ksheera Basti possess rejuvenative and anti-inflammatory properties.

CONCLUSION

Tikta Ksheer Basti and some internal medications were used to treat the patient with Asthi-majja gata Vata in this case study. Basti is the fundamental treatment for all Vata Vyadhi and is considered the Ardhachikitsa (50 percent of all treatment modalities) in Ayurveda since Asthi-majja gata Vata is one of the Nanatmaja Vata Vikara. This case study demonstrated how well Shamana Chikitsa and Shodhana worked to control Asthi-majja gata Vata. Both subjective and objective metrics have shown notable changes, suggesting that the patient's quality of life has significantly improved and that they are better able to present their features.

As of right now, the patient is doing well with his daily routines. Strong hope and a choice for improved Asthi-majja gata Vata management have been provided by the results of this case study.

REFERENCES

1. Pt. Shastri Kashinath, Charak Samhita, Varanasi, Chaukhamba Bharati Academy, Edition 2020, Chikitsa sthana 28/37-39, P 612
2. Kaviraj Shashtri Ambikadutta, Sushrut Samhita, Varanasi, Chaukhamba Sanskrit Sansthan, Edition 2012, Nidan sthana 1/27, P 298
3. Dr. Tripathi Brahmanand, Ashtanga Hridayam, New Delhi, Chaukhamba Sanskrit Pratisthan, Edition 2010, Nidan sthana 15/12, P 539
4. Dr. Tripathi Brahmanand, Ashtanga Hridayam, New Delhi, Chaukhamba Sanskrit Pratisthan, Edition 2010, Sutra sthana 12/1-5, P 170-171
5. Dr. Tripathi Brahmanand, Madhava nidan, Varanasi, Chaukhamba Surbharati Prakashan, Edition 2018, Volume I, Vatavyadhi nidan, Chapter 22/25, P 491
6. Loscalzo J., Harrison's Principles of Internal Medicine, Uttar Pradesh, McGraw-Hill/Medical, Edition 21st (2022), Vol I, Part 11, Section 3, P 3036-3038
7. Pt. Shastri Kashinath, Charak Samhita, Varanasi, Chaukhamba Bharati Academy, Edition 2018, Siddhi Sthana 1/25-26, P 890
8. Shastri L, Shastri B, Yogaratnakara, Purva-khaṇḍa, Rogi Parikṣa Adhyaya, Aṣṭavidha Pariksha, Varanasi, Chaukhamba Prakashan, edition 2018, p 357.
9. Loscalzo J., Harrison's Principles of Internal Medicine, Uttar Pradesh, McGraw-Hill/Medical, Edition 21st (2022), Vol I, Part 11, Section: Rheumatology and Musculoskeletal Disorders. Chapter: Osteonecrosis of Bone (Avascular Necrosis), P 2670–2675.
10. Agnivesha. Charaka Saṃhita, edited by Trikamji yadavji Acharya, Varanasi, Chaukhamba Orientalia, edition 2017, Siddhi Sthana 1/25–28 (Tikta Ksheera Basti), p 985.
11. Sharangdhara, Sharangdhara Samhita, edited by Vidyasagar PS, Varanasi, Chaukhamba Surbharati Prakashan, edition 2014, Madhyama Khanda 9/11–15 (Patra Pinda Sveda), p 218.
12. Pt. Shastri Kashinath, Charak Samhita, Varanasi, Chaukhamba Bharati Academy, Edition 2018, Siddhi sthana 12/12-13, P 724-725
13. Sen Govind Das, Bhaishajya Ratnavali, Varanasi: Chaukhamba Surbharati Prakashan, edition 2019, Vata Vyadhi Chikitsa Adhikara (Dashamoolarishta), p 644.
14. Nityanath, Rasa Ratna Samuchchaya, edited by Mishra SN, Varanasi, Chaukhamba Orientalia, edition 2015, Ch. 19, Lauha Varga (Panchamrit Lauh), p 312.
15. Shastri L, Shastri B, Yogaratnakara, Purvakhaṇḍa, Arsha Chikitsa (Panchasakar Churna). Varanasi, Chaukhamba Prakashan, edition 2018. P 428.

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