

A CASE STUDY ON AVASCULAR NECROSIS OF FEMUR HEAD**Dr. Sachin Tike*¹, Dr. Priyanka Kurde², Dr. Rukmini Shinde³ and Dr. Shivaji Panzade⁴**¹MD Panchakarma, Incharge HOD & Assist. Prof. GAC, Osmanabad.²PG Scholar, Dravyaguna Vidnyan Department, GAC, Osmanabad.³PG Scholar, Rasashastra & Bhaishajyakalpana Department, GAC, Osmanabad.⁴MD Shalakyatantra, Associate Prof. GAC, Osmanabad.Article Received on
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Corresponding Author*Dr. Sachin Tike**MD Panchakarma, Incharge
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Osmanabad.**ABSTRACT**

Avascular necrosis of head of the femur is very commonly raising condition. It is progressive disorder occur due to death of bone cells. Without blood supply bone tissue dies and bone collapses. Artery supplying to femur head is too narrow hence; AVN of femur head is common type of necrosis. A 65yr female patient came with right hip joint pain, difficulty in sitting & walking. Patient has been advised for total hip replacement surgery. In modern medicine treatment is expensive and rather not specific and having poor prognosis too.

According to *Ayurveda Vata, Pitta, Rakta* have very important role in pathogenesis of AVN along with *asthi & majja dhatu kshaya*. *Ayurvedic* treatment like *Jalaukacharan, panchatikta kshir basti, shamanaushadhi* such as *Sarivadyasav, asthimajjapachak vati* found excellent result in this case.

KEYWORD: *Asthi-majjagat vat, avascular necrosis, Jalaukacharan, Panchatikta kshir basti, Sarivadyasav.*

AIM AND OBJECTIVES

1. To assess the efficacy of *jalaukavacharan* (leech application over body parts) in the management of avascular necrosis of femur head.
2. To assess the role of *Panchatikta Kshir Basti* in *Asthimajjagat Vata* w.s.r. to Avascular Necrosis (femur head)
3. To assess the efficacy of *Sarivadyasav* in prevention of further ischaemic changes in case of AVN.

INTRODUCTION

Avascular necrosis is nothing but osteonecrosis, aseptic necrosis or ischaemic bone necrosis, is a disease that may affect several bones. The ischemia causes death and eventual collapse of the bone tissue. Blood flow to the bone is interrupted or reduced, which may be caused by joint or bone injury -traumatic injury such as dislocated joint, may reduce the blood supply to a section of bone, leading to bone death.

In AVN healing process is usually ineffective and the bone tissue breaks down faster than the body can repair them.

As per Ayurveda, AVN can be correlated with *Asthimajjagat Vata*.^[1]

The clinical features of *asthimajjagata vata* described as *Ushna pidan abhinandati* (symptoms get relieved by hot fomenting and massaging), *Sambhajati*(breaking type pain), *Suchibhiriv tudyate*(pricking type pain), *Vinaman* (bending of body part).^[2] Leeches are used in the medical practice since ancient times to treat many diseases.^[3] It is a method in which localized impure blood is let out to heal the tissue. Leech is used to relieve venous congestion and to improve blood circulation. Application of leech that is *jalauka* is the treatment for *raktadushti*. Leech has hirudin in its saliva which has anticoagulant action which helps to reduce ischaemic changes at artery supplying to femoral head.

Ghruta & kshirbasti of *Panchatikta gana dravyas* acts on *Asthivah strotas*, hence *panchatikta kshir basti* is used in this case.^[4]

Sarivadyasava is having Raktadustihara property and also reduces further ischemic changes at blood arteries level.

MATERIALS AND METHODS

Case Presentation

A 65 year old female patient, diagnosed with AVN – femoral head visited to government ayurvedic college, Osmanabad with complaints of pain in right hip joint region since 1.5 years which was associated with difficulty in doing normal daily activities such as walking, sitting, squatting etc. pain aggravate due to cold weather, gastric upset, and supine position. Alleviating factors were warm food and warm weather.

Past history

Patient was apparently healthy, after some days developed pain in right hip joint gradually increasing. The patient was diagnosed with AVN of right femoral head with aid of X-ray by an orthopaedic surgeon and had advised for complete hip replacement.

Examination of patient

1. Nadi-74/min. 2. Mala-malavshambha 3. Mutra - prakrut 4. Jivha - saama 5. Shabdha - prakrut 6. Sparsha -prakrut 7. Druka – prakrut 8. Akrti-sthul

Investigation

X-Ray: Grade 4 avascular necrosis of right femoral head. HbsAg: Negative
Hb: 13g/dl BT: 2 minuits CT: 5minuits PTINR: 1.1

Treatment**A) Deepan Pachan chikitsa**

1. Hingavashtak Churna 3gm BD For 1st 1 week

B) Panchakarma Chikitsa

- Baahya chikitsa- sarvanga snehana and nadi swedan^[5]
- Sadya virechana - Shunti siddha eranda Sneha In vardhaman matra for 3 days
- Shodhan yog basti^[6]
- 1. Anuvasana with- dashmula taila 60 ml^[7]
- 2. Niruha basti- 450ml kwath basti prepared with bharad churnas of Erandamula, Dashamula, Rasna, Punarnava 10 g each+ 60ml dashamula taila+15ml honey+5g saidhav.
- Jalaukavacharan at right hip joint region -3 jalauka simultaneously, once a week -4 settings done.
- Panchtikta kshir basti- kshirpak prepared.
- Preparation of Panchatikta kshir basti - Dravyas included in Panchatikta that is bharad churnas of nimba + patol +vasa +guduchi + kantakari taken 10g each. Prepared kwatha of 200 ml + 200 ml of milk boiled it and made 200 ml + 30 ml panchtikta ghruta. Given for 16 days.
- Majja basti 150 ml given for 1 month – daily.

C) Shaman Chikitsa

1. *Dashmularishta* - 20 ml for BD
2. *Rasarajeshwar rasa*^[8] - 1 BD
3. *Trayodashang guggul*^[9] - 2BD
4. *Ashtiposhak vati* - 2BD
5. *Vishtinduk vati* - 1BD

Above mentioned *shaman Chikitsa* continued for 15 days.

Treatment after 15 days

1. *Sarivadyasava*^[10] - 20 ml for 2 times
2. *Rasarajeshwar rasa* - 1tb for 2 times
3. *Lakshadi guggul*^[11] - 2 tb for 2 times
4. *Asthimajjapachak vati*^[12] - 2 tb for 2 times
5. *Vishtinduk vati* - 1BD
6. *Gandharva haritaki* - 5gm HS
7. *Navneet +seeta* - 1 tsf at morning
8. *Shivagutika*^[13] - ½ BD Above treatment continued for 1 month

D) Sthanik chikitsa

1. *Valuka swed*^[14]
2. *Dashang lepa*^[15]

IMPROVEMENT IN PATIENT

	AT THE TIME OF ADMISSION	AFTER 15 DAYS	AFTER 30 DAYS
1. Pain	Severe	Mild	Mild
2. Stiffness	Severe	Moderate	Mild
3. Gait	Trendelenburg	Trendelenburg	Slightly improved
4. Movement of lower Limb	Partial restricted	Moderate	Mild
5. SLR	45	45	70
6. Burning at right hip joint	Severe	Moderate	Mild

DISCUSSION

Blood supply to femoral head gets hampered in Avascular Necrosis, NSAID & steroidal treatment is being administrated for pain management. According to *ayurveda*, *Aam doshavruddhi* occurs here & again it causes less blood supply to femoral head. Leech has hirudin in its saliva which has anticoagulant action which helps to reduce ischaemic changes

at artery supplying to femoral head. *Ghruta & kshirbasti* of *Panchatikta gana dravyas* acts on *Asthivah strotas*. While thinking about *asthi-majjagata vata*, we have to think about *Asthi & majja*. *Kshirbasti* that we used gives nourishment to *Asthi dhatu*. *Panchatikta gana dravyas* are having *pittaghna* activity. *Pittadhara kala* is correlated with *majjadhara kala* & hence *panchatikta gana dravyas* reduce pathology occurring at *majjadhatu*. Osteoporotic changes in case of Avn get reduced by using *Lakshadi guggulu*. *Asthimajjapachak* removes the *dathvagnimandya* of these *dhatu*s and by removing the *strotorodha* it improves the blood circulation. *Rasarajeshwar rasa* contains *kajjali* hence having *yogvahi* property that enhances the action of other drugs and very good action on *majjavaha strotasa*. *Shiva gutika* is *pittaghna* in nature acts on *raktavaha strotas* and its action over neurological disorder is well known. *Trayodashang guggul* reduces the osteoarthritic changes and thereby help to strengthen the affected bone. *Sarivadyasav* helps to remove & prevent further *Rakta dushti* such as *sira shaithilya* or *kathinya* that means prevent the necrosis.

CONCLUSION

As per the above discussion, *Ayurvedic Panchkarma* therapy like *Jalaukavacharan*, *Panchatikta kshir basti* along with *Shaman chikitsa* that is internal medicine are effective for treatment of avascular necrosis femur head; which can be correlated to the *Asthimajjagata vata*.

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