



ORIGINAL RESEARCH PAPER

Ayurveda

CLINICAL ANALYSIS OF VASTI IN AVASCULAR NECROSIS- A SINGLE CASE

KEY WORDS: Avascular necrosis, *Asthipradoshaja Vikara, basti, panchakarma*

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ABSTRACT

Avascular necrosis (AVN) is a malady resulting from the transitory or everlasting hammering of blood supply to the bone. The bone tissue dies without blood, and may cause the bone to collapse. A male patient, aged about 35 years with the complaints of pain and stiffness in right hip joint, and thigh region with difficulty in walking since 4 years was presented in panchakarma OPD, Rishikul Campus, Haridwar. On the basis on MRI –reports the patient was diagnosed as a case of Avascular necrosis of neck of femur. Patient was treated with classical Panchakarma treatment particularly with *Vasti Karma* by using drugs like *Panchatikta* and *Guggulu Tiktaka Ghritam* in *Asthapana Basti* and *Vrismooladi Taila* for *Anuvasana Vasti* as *Kala Vasti* schedule. This is a case study representative that a combination of herbal medicines and *panchakarma* procedures may be cooperative to arrest further necrosis and restore the bones.

INTRODUCTION

Avascular necrosis (AVN), also called osteonecrosis, aseptic necrosis, or ischemic bone necrosis, is a condition that occurs when there is loss of blood to the bone¹. Any disruption to the blood supply causes bone to die. If not stopped, this process eventually causes the bone to collapse. As many as 20,000 people develop AVN each year². It's most common in people between the ages of 30 and 60³. According to Ayurveda, avascular necrosis can be considered in *Asthipradoshaja Vikara*. In the condition of AVN, blood (Rakta dhatu) supply to the head of femur is decreased due to *Margavrodha* (occlusion of blood vessels) or *Abhighata* (trauma) which leads to decreased nutrition supply to that particular part and ultimately there is reduction in *Asthi Dhatu* (bone density), and further *Kshaya* in *Asthi Dhatu* leads to *Kshaya in Majja Dhatu*⁴ also. *Margavarodh* and *Dhatu Kshaya* both are present in the condition of AVN and both factors responsible for *Vata Vridhi*⁵. Due to vitiated *Vata Dosha* it is further responsible for vitiation of Pitta and *Kapha Dosha*. That why *Vasti* is the treatment of choice in the AVN, because *Vasti* is first line of treatment⁶ of for *Vata Dosha* and also regulate *Pitta, Kapha Dosha* and *Rakta*⁷ also. In AVN, *Vata dominant Tridosha* involve and *Dushya* are *Rakta, Asthi* and *Majja Dhatu* so *Panchatikta Ksheera Vasti* and *Vrismooladi Taila Matra Vasti with Shamana Drugs* are very fruitful.

CASE REPORT:

A male patient, aged about 35 years with the complaints of pain and stiffness in right hip joint, and thigh region with difficulty in walking since 4 years was presented in panchakarma OPD, Rishikul Campus, Haridwar.

H/o present illness:

Patient was healthy 4 years back as per his opinion, and then he developed mild pain and stiffness in right hip joint the pain gradually increased and felt difficulty during walking, after that patient go for allopathic treatment and diagnosed as avascular necrosis of head of femur. He took allopathic medicine but got temporary relief and before 3monhs increases the severity of symptoms, after that he came in department of panchakarma, Rishikul campus, haridwar.

Observations:

Signs: Difficulty in walking and painful hip joint movements, slow and antalgic gait.

Symptoms: pain in Right hip joint and thigh regions and difficulty in hip joint movements.

Investigations: CBC- within normal limit

MRI report (Dated- 28/7/2013) – Avascular necrosis of femoral head of right. FICAT Stage II/III

X-Ray report (21/02/2015) - ?? Right Avascular necrosis head of femur.

Examination of the Rogi (patient) according to Ayurveda-

Parikshya Bhava (examination of patient)	Observations
Prakriti	Vata-Pitta
Vaya	Madhyam
Bala	Madhyam
Agni	Sam
Abhyavarana Shakti	Sam
Jarana Shakti	Madhyam

Treatment:-

After the proper diagnosis the patient administered with *Vasti Chikitsa* in the schedule of *Kala Vasti*⁸ with *Samana* drugs. After that, follow up by *Samana* drugs for 2 months.

A. Vasti Karma: The *Vasti karma* planned in schedule of *Kala Vasti*. In this *Kala Vasti* schedule *Panchatikta Ksheera Vasti*⁹ given as a *Niruha Vasti* and *Anuvasana Vasti* given by *Vrismooladi taila*¹⁰ in the amount of 50 ml.

Contents of *Panchatikta ksheera Vasti-*

- *Madhu* – 60gms
- *Saindhava lavana* – 05gms
- *Guggulu tiktata ghrita* – 90ml
- *Panchatikta Kwath* – 240ml
- *Putoyavanyadi Kalka* - 30gms
- *Ksheera*-240ml

The contents of *Kwatha* are *Guduchi(Tinospora cordifolia), Nimba(Azadirachta indica), Patola(Trichosenthu es dioica), Vasa(Adhatoda vasica)* and *Kantakari(Solanum surattense)*.

Anuvasana Basti:

Vrismooladi Taila was administrated as *Anuvasan Vasti*. The contents of *Vrismooladi Taila* contents are *Guduchi(Tinospora Cordifolia), Vasa(Tinospora Cordifolia), Chitakamoola (Plumbago zeylanica)* and *Ashwaghanda(Withania Somnifera)*. The dose of *Anuvasana Basti* is 70 ml.

B. Shamana Drugs

Palliative treatment was given with following drugs.

- *Kaishor Guggulu*¹¹ – 2 pills (500mgm) three times a day.
- *Manjisthadi Kwatha*¹² – 40ml two times a day.
- *Chandraprabha vati*¹³ – 2 pills (500mgm) three times a day.
- *Ashwagandha (Withania somnifera) Churna* – 3gms + *Madhuyasthi (Glycyrrhiza glabra) Churna* – 2gms three times a day

Assessment Criteria & Observations- Gradation method adopted;

Pain on walking Grade

- Severe pain while walking- 4
- Moderate pain while walking- 3
- Mild pain while walking- 2
- Occasionally while walking -1
- No pain while walking -0

Local Pain Grade

- Always in rest condition -4
- Radiating pain- 3
- Pain on pressure -2
- Occasionally -1
- No pain- 0

Gait Grade

- Unable to walk -4
- Walk with support with antalgic gait- 3
- Walk without support with antalgic gait -2
- Occasionally antalgic gait-1
- Normal gait -0

Movements of joints Grade

- No joint movement- 4
- Restricted with severe pain -3
- Partially restricted -2
- Restriction initially -1
- No restriction -0

Stiffness Grade

- Whole day and night- 4
- After long sitting and walking -3
- Almost 30 min- 2
- Occasionally present -1
- No stiffness- 0

Effect of therapies on AVN:

S.NO.	Symptoms	B.T.	A.T.
1.	Pain on walking	4	2
2.	Local Pain	4	1
3.	Gait	3	2
4.	Movements of joints	3	2
5.	Stiffness	1	1

RESULTS

After treatment patient felt marked improvement in all sign and symptoms. Patient was found relief in pain and stiffness in hip joint and thigh region. Pain during walking also reduced.

DISCUSSION

Probable Mode of Action of Panchatikta Ksheera Vasti-

In *Panchatikta Ksheera Vasti*, *Panchatikta* drugs (*Guduchi*, *Vasa*, *Patola*, *Kantakari*, *Neem*) having predominance of *Vayu* and *Akasha Mahabhuta*(space element). Hence, it has got similarity towards body elements like *Asthi*. *Tikta Rasa* also reduces *Kleda* and *Kotha* and by virtue of *Snigdha Guna*. The decoction made in *Ksheera* which is having *Snigdha* (oleaginous) and *Madhura Guna*(properties) which subside *Vata DoSha* and *Pitta Dosha* and acts as *Brimhana* (nourishing). *Saindhava* having *Sukshma Guna* which is responsible for circulation in micro channels of the body¹⁴.

Guggulutiktaka Gharita used as *Sneha Dravya*. *Guggulu* and maximum *Dravyas* of this *Gharita* having *Tikta Rasa*, *Ushana Virya* and *Madhura* (sweet) and *Katu Vipaka*. These properties are responsible for normal functioning of *Dhatvagni* (metabolic stage)

and provide nourishment to the *Asthi Dhatu* (bony tissue).

Probable Mode of Action of Vrishmooladi Taila Anuvasana Vasti-

The contents of *Vrishmooladi Taila* are *Guduchi*(*Tinospora Cordifolia*), *Vasa*(*Tinospora Cordifolia*), *Chitakamoola* (*Plumbago zeylanica*) and *Ashwagandha* (*Withania Somnifera*). Here *Guduchi*, *Vasa* and *Aswagandha* are *Tikta* rasa predominant drugs, which are having *rotoshodhana* property. *Chitakamoola* having *Deepaniy* property and responsible for *Rotoshodhana*. Due to *Madhur Rasa* and *Snigdha Guna* *Ashwagandha* provide nourishment to the bone.

Probable Mode of Action of Shaman Drugs

- *Kaishor Guggulu* – *Kaishor Guggulu* is a drug of choice in the condition of obstruction in blood vessels because *guduchi* is the main contain
- *Manjisthadi Kwatha* – due to *Tikta Rasa* and *Sukshma Guna* it is having *Rotoshodhana* property.
- *Chandraprabha vati*– The main ingredient of *Chandraprabha Vati* is *Krchura*(*Hedychium Spicatum*), *Guggulu*, *Shilajatu*. *Karchura* is *Tikta Rasa* predominant drug, *Guggulu* and *Shilajau* *Rasayana*, *Balya* and *Rotoshodhana* in nature.

CONCLUSION

On the basis of this single case study it can be concluded that *Panchakarma* procedure such *Vasti* along with certain palliative medicine are effective in the management of avascular necrosis of head of femur. Further clinical trials are needed to establish a standard management of Avascular necrosis.

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