



## CASE REPORT

### EFFECT OF PANCHA TIKTA KSHIRA BASTI KARMA IN AVASCULAR NECROSIS

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#### Summary:

**Introduction:** Avascular necrosis (AVN) is a condition that occurs due to loss of blood supply to the bone which leads to cellular death of bone tissue. Sometimes this condition involves the bones of a joint cause's destruction of the joint. In early stages there is no symptom but in advance stage patient is suffered from severe pain and dysfunction of affected joint. A female patient aged about 35 years with the complaints of pain in both hip joints and thigh region with difficulty in walking was admitted on bed no. 20 in Female ward. It was diagnosed as a case of Avascular necrosis of neck of femur based on MRI- reports. As per Ayurveda the patient is diagnosed as a case of *Asthipradoshaja Vikara* there is dominance of *Vata Dosha*. Patient was treated with classical Panchakarma treatment particularly with *Basti Karma* by using drugs like *Panchatikta Kvatha* and *Guggulu Tiktaka Ghritam* along with conventional drugs of *Basti* as *Kala Basti* schedule. Certain oral medication like *Kaishore Guggulu*, *Manjishtadi Kvatha*, *Dashamula Kvatha* and *Triphala Churna* etc were given. After completion of treatment the pain in hip joints and thigh region was reduced, range of movement of hip joint was improved and difficulty in walking was much reduced and walking distance was also improved. In the acute stage of AVN ayurveda play an important role but in advance stage of the disease still an awaited, but with the Panchakarma therapy along with shaman drugs improved the quality of life.

**Keywords-** Avascular necrosis, *Asthipradoshaja Vikara*, *Panchatikta Kshira Basti*.

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## INTRODUCTION:

Avascular necrosis (AVN) is defined as cellular death of bone components due to interruption of the blood supply; the bone structures then collapse, resulting in bone destruction, pain, and loss of joint function <sup>[1]</sup>. Avascular necrosis (AVN) of the femoral head is an increasingly common cause of musculoskeletal disability, and it poses a major diagnostic and therapeutic challenge, although patients are initially asymptomatic, avascular necrosis (AVN) of the femoral head usually progresses to joint destruction, requiring total hip replacement (THR), usually before the fifth decade <sup>[2]</sup>. In the early stage there is no sign and symptoms but in advanced stage the bone collapses and shows many symptoms like groin or hip pain radiating to buttocks, thigh or knee that is aggravated by weight-bearing. If in this condition the disease is untreated than the pain is progressively increase and worsens with time and use, on the later stage increases pain on rest which may be worse during night and may have associated with morning stiffness also. In Ayurveda, there is no direct co-relation with AVN, in this condition the treatment modality of this disease is according to *Dosha* and *Dushya*<sup>[3]</sup>. Here in AVN, it seems that the predominant *Dosha* is *Vata* and *Dushya* is *Asthi* and on the chronic stage there is *Tridosha* involvement. So, in this condition panchakarma procedure like *Basti Karma* (Rectal administration of drugs) with *Shamana* drugs (palliative treatment) having very

effective results and maintains the quality of life of the patient.

## CASE REPORT:

A female patient, aged about 35 years with the complaints of pain and stiffness in both hip joints, and thigh region with difficulty in walking since 2 years was admitted on bed no. 20 in Female ward. This reveals the chronicity of the disease. Patient has two children and history of facial paralysis twice in post-natal period. She took corticosteroid for longer time. This history of the patient reveals the possible role of corticosteroids in the causation of AVN.

### Observations:

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

**Symptoms:** Pricking type of pain in bilateral hip joints and thigh regions and difficulty in hip joint movements.

**Investigations:** CBC- within normal limit

MRI report (Dated- 21/03/2013) - Bilateral avascular necrosis 4 C on the right side and 3 B on the left side.

Examination of the Rogi (patient) according to Ayurveda-

<i>Parikshya</i> (examination of patient)	<i>Bhava</i> of	Observations
<i>Prakriti</i>		<i>Kapha-pitta</i>
<i>Vaya</i>		<i>Madhyama</i>
<i>Bala</i>		<i>Madhyama</i>
<i>Agni</i>		<i>Madhyama</i>
<i>Abhyavarana Shakti</i>		<i>Madhyama</i>
<i>Jarana Shakti</i>		<i>Avara</i>

Koshtha	Msdhaya
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### Treatment:-

After the proper diagnosis the patient administered with basti chikitsa in the schedule of *Kala Basti* start from 11/03/2015 to 27/ 03/ 2015 with *Samana* drugs. After that follow up by *Samana* drugs for one month.

- a) **Basti Karma:** The *Basti karma* planned in schedule of *Kala Basti* <sup>[4]</sup>. In this *Kala Basti* schedule *panchatiktakshira Basti* <sup>[5]</sup> given as a *Niruha Basti* and *Anuvasana Basti* given by *Yasthimadhu Taila* <sup>[6]</sup> in the amount of 50 ml.

Contents of panchatikta kshira Basti-

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

The contents of *Kwatha* are *Guduchi*, *Nimba*, *Patola*, *Vasa* and *Kantakari*.

- b) **Shamana chiktisa:** Palliative treatment was given with following drugs

- *Kaishor Guggulu* <sup>[7]</sup> – 2 pills (500mgm) three times a day
- *Dashamool Kwath* <sup>[8]</sup> – 40ml two times a day
- *Laghu Manjishtadi Kvatha* – 40 ml two times a day

- *Ashwagandha*(*Withania somnifera*)*Churna* – 3gms + *Chophini*(*Smilex china*) – 500mg + *Madhuyasthi* (*Glycyrrhiza glabra*) – 2gms three times a day

- *Triphala Churna* – 5gms at bed time

### Assessment Criteria & Observations

#### Gradation Pattern Adopted:-

#### Pain with 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

#### Movements of joints Grade

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

#### Gait Grade

Unable to walk	4
Walk with support with severe pain	3
Walk with support with mild pain	2
Occasionally during walking	1
Normal without pain	0

#### Local Pain Grade

Always in rest condition	4
Radiating pain	3
Pain on pressure	2
Occasionally	1
No pain	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.
a)	Pain with walking	4	1
b)	Movements of joints	3	1
c)	Gait	3	2
d)	pain	4	2
e)	Stiffness	4	2

## RESULTS

After the course of treatment relief in sign and symptoms of the patient, marked improvement found in the pricking type of pain and stiffness in hip joint and thigh region. Patient felt mark improvement in walking and the gait of patient improved.

## DISCUSSION

Avascular necrosis is a degenerative condition of a bone which is progressive in nature, due to lack of blood supply to the particular part of a bone due to injury or any occlusion in the blood vessels nourishing the bone tissue. According to *Ayurvedic* point of view there is no direct co-relation with avascular necrosis but on their clinical presentation there is dominance of *Vata Dosha* and *Vikruti*(vitiation) of *Asthi Dhatu*. In AVN the blood (*Rakta Dhatu*) supply to the femoral head is decreased due to any type of *Margavrodha* (occlusion of blood vessels) or *Abhigata* (trauma), and ultimately leads to necrosis. *Margavrodha* and *Abhigata* both are

also responsible to aggravation of *Vata Dosha* and increase *Vata Dosha* finally resulting into loss of *Asthi Dhatu*. In advance stage due to continuous *Vata Dosha* (due to necrosis) imbalance it further responsible for vitiation of *Pitta* and *Kapha Dosha* also. So here *Basti* is a choice of treatment for AVN, in all Panchakarma procedures because *Basti* is first line of treatment<sup>[9]</sup> of for *Vata Dosha* as well as *Pitta*, *Kapha Dosha* and *Rakta* also<sup>[10]</sup>.

#### Probable mode of action of Panchatikta

**Kshira Basti-** *Panchatikta Kshira Basti* is very effective and proven treatment for avascular necrosis because in *Panchatikta Kshira Basti* all ingredients are *Tikta Rasa* which having predominance of *Vayu* and *Akasha Mahabhuta* (space element). Hence, it has got resemblance towards body elements like *Asthi*. *Tikta Rasa* also reduces *Kleda* and *Kotha* and by virtue of *Snigdha Guna*. The decoction made in *Kshira* which is having *Madhura* and *Snigdha* (oleaginous) properties which help to control *Vata Dosa* and *Pitta Dosa* acts as *Brimhana* (nourishing). Due to *Sukshma Guna* of *Saindhva* it reaches up to micro channel of the body<sup>[11]</sup> and helps to open fresh blood supply to the bone tissue. In this *Basti Gugglutiktaka Gharita* used as a *Sneha Gugglu* and *Tikta Dravyas* are having *Tikta Rasa, Ushana Virya* and *Madhura* (sweet) and *Katu Vipaka* favours normal functioning of *Dhatvagni* (metabolic stage), facilitating increased nutrition to the *Asthi Dhatu* (bony tissue). *Gharita* (ghee) is *Vata-*

*Pittashamaka* (reduces *Vata* and *Pitta Doṣa*), *Rakta Prasadaka*, *Balya* (increases body strength), *Agnivardhaka* (increases appetite as well as metabolism), *Madhura*, *Shita Virya* (cold in potency). Thus, it pacifies *Vata*; improves the *Dhatu Upachaya* (metabolism of the tissues) and acts as a rejuvenator of the body. *Gharita* has the properties of *Samśkarasya Anuvartana* (that which inherits the properties of other drugs without altering itself) precipitating bio-availability of other drugs. *Gharita* also contains vitamin D which plays an important role to utilize calcium and phosphorous from blood and helps in bone formation<sup>[12]</sup>. Thus helps in the *Samprapti Vighaṭana* (breaking down of pathology) of the *Ashti Kshaya*<sup>[12]</sup>.

#### **Anuvasan Basti:**

*Yasthimadhuadi Taila* was administrated as *Anuvasan Basti* which is having *Madhur Rasa*, *Madhur Vipaka*, *Guru Snigdha Guna*, *Shita Virya*, and having *Vata-Pitta Shamaka* property. *Yasthimadhu* is also help to increase the blood circulation due to *Rasa Rakta Prasadaka* property. Thus the combination of these *Panchatikta Kshira* and *Yasthimadu Taila Basti* acts at different level to in treating *Avascular Necrosis* of neck of femur.

#### **Shamana drugs:**

- *Kaishore Guggulu* is a drug of choice in *Vatarakta* in which obstruction in blood vessels is main pathology. So here it is very useful for improvement of blood circulation.

- *Dashamula Kvatha* is *Tridosahara*, *Vedana sthapak* and *Sroto Shodhaka*, so in the condition of *AVN* it gives relief in sign and symptom of disease and for breakdown the *Samprapti* (pathogenesis) of the disease.
- *Laghu Manjishtadi Kvatha* is also indicated in the treatment of *Vatarakta* and it is also *rakta Prasadaka*.
- *Ashwagandha* is a *Rasayana* and *Brahmghana* property so useful in all type of *Dhatukshya*.
- *Chopchini* is *Vedanahara*, *Shothanashaka* and able to carry drugs in *Sukshma Srotasa*.

#### **CONCLUSION**

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

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