



# Role Of Mahasneha Basti In The Management Of Bilateral Acetabular And Coccygeal Fracture (Asthi Bhagna): A Case Study

Dr. Saurabh S. Chindage<sup>1</sup> Dr. Abhayachandra S. Inamdar<sup>2</sup>

<sup>1</sup>P.G.Scholar, Kayachikitsa Department, Tilak Ayurvedic Mahavidyalaya, Pune

<sup>2</sup>Dr. Abhayachandra S. Inamdar, (Asso.Professor), Tilak Ayurvedic Mahavidyalaya, Pune

## Abstract

### Background:

Acetabular fractures following road traffic injuries are managed conservatively or surgically depending on fracture stability and displacement. Coccygeal fracture-dislocation can cause severe pain and functional limitation. In Ayurveda, trauma-induced fractures are correlated with Asthi Bhagna and aggravated Vata Dosha, where Basti therapy is considered the principal line of management.

### Purpose:

To evaluate the role of Mahasneha Basti in the conservative management of bilateral acetabular and coccygeal fractures following road traffic injury.

### Case Presentation and Methods:

A 28-year-old male presented with severe right lower limb pain, low back pain and inability to stand following a fall from a scooty. MRI of hip joint revealed a comminuted undisplaced fracture involving the anterior wall of the right acetabulum and an undisplaced fracture of the anterior wall of the left acetabulum with marrow edema. X-ray of the sacrococcygeal region showed fracture-dislocation of the second and third coccygeal segments with incurving. The patient was managed conservatively with pelvic stabilization and integrative Ayurvedic therapy with Mahasneha Anuvasana Basti administered over three months in a structured tapering regimen. Supportive therapies included Sthanik Pichu, Bashpa Sweda, internal medications, and physiotherapy.

### Results:

Gradual reduction in pain, improved weight-bearing capacity and enhanced mobility were observed during follow-up. Radiographic evaluation after one month demonstrated callus formation, indicating progressive fracture healing.

### Conclusion:

Mahasneha Basti, as part of integrative conservative management, may contribute to pain reduction, functional recovery and fracture healing in stable trauma-induced Asthi Bhagna. Further clinical studies are warranted to validate these findings.

## Keywords

Mahasneha Basti, Asthi Bhagna, Acetabular fracture, Coccygeal fracture, Road traffic injury, Basti therapy, Integrative management, Vata Dosha

## Introduction

Acetabular fractures are complex injuries commonly resulting from high-energy trauma such as road traffic accidents. The management strategy depends on fracture displacement, joint stability and associated injuries. Undisplaced or minimally displaced fractures are typically managed conservatively with immobilization and restricted weight-bearing. However these injuries may cause severe pain, impaired mobility, and prolonged functional limitation. Coccygeal fracture-dislocation, though often managed non-operatively, can significantly affect sitting tolerance, ambulation, and quality of life.

In contemporary orthopedic practice, stable acetabular fractures without displacement are treated with rest, analgesics, pelvic support, and gradual physiotherapy. Despite conservative care, pain and delayed functional recovery may persist in some patients.

In Ayurveda, trauma-induced musculoskeletal injury is described under Bhagna, specifically Asthi Bhagna when bone tissue is involved. Such injuries are primarily associated with aggravated Vata Dosha, which governs movement, structural integrity, and neuromuscular coordination. Management principles emphasize Vata Shamana (pacification of Vata), Snehana (oleation), Swedana (sudation) and especially Basti Chikitsa, which is considered the principal therapy for Vata disorders.

Mahasneha Basti a form of Anuvasana Basti using unctuous medicated formulations is traditionally indicated in Vata-dominant conditions affecting bones and joints. It is believed to support tissue nourishment (Asthi Dhatu Poshana), reduce pain, and restore functional integrity. However, documented clinical evidence describing its role in fracture management remains limited.

The present case report aims to describe the role of Mahasneha Basti as a primary therapeutic intervention in the integrative conservative management of bilateral acetabular and coccygeal fractures following road traffic injury.

## Case Presentation

### Patient Information

A 28-year-old male with no known comorbidities presented to the outpatient department following a road traffic injury due to a fall from a scooter. The patient reported immediate onset of severe pain in the right lower limb and low back region following the incident.

### Presenting Complaints

Severe right lower limb pain

Low back pain

Inability to stand or bear weight

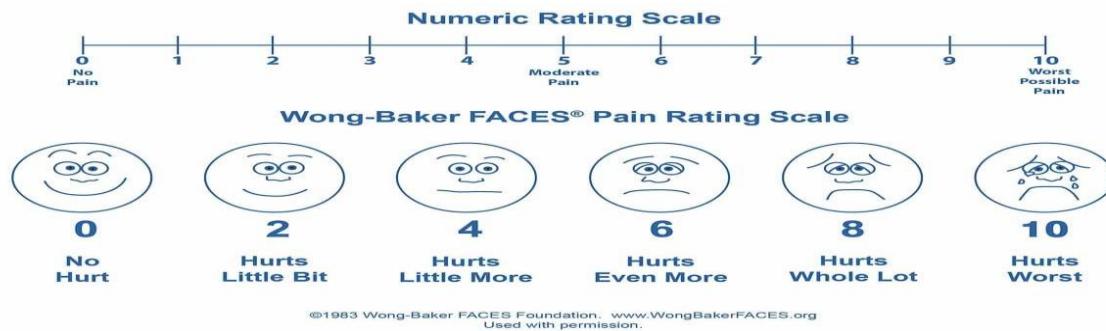
Difficulty in movement

Abrasions and contusions over both knees and elbows

There was no history of loss of consciousness, vomiting, bowel or bladder disturbance, or prior musculoskeletal illness.

## Clinical Findings

On examination, the patient appeared distressed due to pain. Local tenderness was present over the hip region and sacrococcygeal area. Pain was aggravated by attempted weight-bearing and hip movements. No gross deformity of the pelvis was noted. Neurological examination of the lower limbs revealed no motor or sensory deficits. Peripheral pulses were palpable and normal.

**Assesment criteria****Subjective criteria:** Pain**Objective criteria:**

Normal walking with proper gait	0
Walk without support but shuffling gait	1
Walk with support	2
Unable to walk	3

**Diagnostic Assessment****MRI of Hip Joints:**

Comminuted undisplaced fracture with marrow edema involving the anterior wall of the right acetabulum

Undisplaced fracture with adjacent marrow edema along the anterior wall of the left acetabulum

**X-ray Pelvis with Bilateral Hip Joints (On admission):**

No obvious displacement of hip joint structures

X-ray Sacrum and Coccyx (Lateral View):

Fracture-dislocation of the second and third coccygeal segments with incurving

Based on radiological findings, the fractures were considered stable and suitable for conservative management.

**X-ray Pelvis with Bilateral Hip Joints (One month later):**

Previously noted fracture involving the coccygeal segments shows evidence of interval healing.

Early callus formation is seen at the fracture site.

**Treatment Plan**

Treatment regimen- Total duration of treatment- 3 Months

1)Sarvadehik Treatment- A) Niruha Basti- Erandmuladi madhutailik

## B) Anuvasan Basti- Mahasneha Basti

For the initial two days, Niruha Basti with Erandamuladi Madhutailika Basti was administered. From the third day onwards, Mahasneha Basti was given in a dose of 60 ml daily for seven days. Subsequently, the dose was increased to 80 ml daily for the next seven days.

After this period, the basti was continued with a tapering frequency: three times per week for two weeks, followed by twice per week for the next two weeks, and finally once per week for the subsequent two weeks.

2)Sthanik Pichu Dharana(Kati-sakthi sthan)-Mahamasha Taila

3)Abhyantar Treatment-

Sr.No.	Name Of Drug	Dose And Duration	Anupan
1.	Lakshadi guggul	2 tabs BD for 3 months	Koshna jal
2.	Yavanyadi choorna	500mg BD for 3 months	Koshna jal
3.	Cap.Kshirbala	2 capsules OD for 3 months	Cow milk
4.	Balarista	20ml BD for 3 months	Koshna jal

Progress Of Treatment-

Days	Pain Gradation	Response
0-14	8-10	Unable to walk
14-30	6-8	Walk with support
30-51	2-6	Walk without support but shuffling gait
51-60	0-2	Normal walking with proper gait

## Discussion

Hip fractures in young adults are usually associated with high-energy trauma such as road traffic accidents and two-wheeler falls. In contrast to elderly patients, significant force is typically required to produce fractures in this age group. Severe pain and inability to bear weight following trauma should raise strong suspicion of underlying hip or acetabular injury.

In this case, the patient presented with intense right lower limb pain and inability to stand after a scooty fall. Although plain radiographs are the first-line investigation in trauma, undisplaced fractures may be missed. MRI played a crucial role in early diagnosis by demonstrating a comminuted undisplaced fracture with associated marrow edema, indicating acute trabecular injury.

Early detection of such fractures is important to prevent complications such as displacement, avascular necrosis, chronic pain, and post-traumatic arthritis. Stable, undisplaced fractures can often be managed conservatively with strict non-weight bearing and close follow-up.

This case emphasizes the importance of early MRI evaluation in young trauma patients with severe pain and inconclusive initial imaging findings.

## Conclusion

This case highlights the importance of maintaining a high index of suspicion for occult hip fractures in young patients following high-energy trauma. Severe pain and inability to bear weight should not be overlooked, even if initial radiographs are inconclusive. Early MRI plays a crucial role in detecting undisplaced fractures and marrow edema, allowing timely management and preventing long-term complications. Prompt diagnosis and appropriate follow-up are essential to ensure optimal functional recovery.

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