



## Guidance Document for processing PM-JAY packages

### Depressed Fracture

Procedure covered: 1

Specialty: Neurosurgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price	ALOS
Depressed Fracture	Depressed Fracture	S800047	SN001A	40,000	7 days

#### Minimum qualification of the treating doctor:

**Essential:** MCh/DNB/Equivalent (Neurosurgery)

**Special empanelment criteria/linkage to empanelment module:** Functional Operational Theatre

#### Disclaimer:

For monitoring and administering the claim management process of **Depressed fracture**, NHA shall be following these guidelines. This document has been prepared for guidance of PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of procedures mentioned above. The hospitals can also refer to this document so that they have the insight on how the claims will be processed. However, this document doesn't provide any guidance on clinical and therapeutic management of patient. In that respect the hospitals and physicians may refer to any other relevant material as per the extant professional norms.

### **PART I: GUIDELINES FOR CLINICIANS AND HEALTHCARE PROVIDERS**

#### **1.1 Objective:**

The purpose of this document is to act as a guidance & a clinical decision support tool for the clinicians in deciding the line of treatment, plan clinical management of patient and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PMJAY and selection of corresponding Health Benefit Package.

It will also serve as a tool for hospitals to determine and submit the mandatory documents required for claiming reimbursement of health benefit package under PMJAY.

#### **1.2 Clinical key pointers:**

##### **Depressed skull fracture**

Depressed skull fractures result from a high-energy direct blow to small surface area of the skull with a blunt object such as a baseball bat. Comminution of fragments starts from the point of maximum impact and spreads centrifugally. Most of the depressed fractures are over the frontoparietal region because the bone is thin and the specific location is prone to an assailant's attack. A depressed fracture may be open or closed. Open fractures, by definition, have either a skin laceration over the fracture or the fracture runs through the paranasal sinuses and the

middle ear structures, resulting in communication between the external environment and the cranial cavity. Open fractures may be clean or contaminated dirty. Presentation: The presentation may vary depending on other associated intracranial injuries, such as epidural hematoma, dural tears, and seizures.

## **DIAGNOSIS**

### **Investigations**

- CT scan is the gold standard for diagnosis of skull fractures. Thinly sliced bone windows of up to 1-1.5 mm thick, with sagittal reconstruction, are useful in diagnosis. Helical CT scan is helpful in occipital condylar fractures, but 3-dimensional reconstruction usually is not necessary. CT scan for skull fractures was found to have a sensitivity of 85.4% and a specificity of 100%.
- Skull films are suboptimal in revealing basilar skull fractures. Hence, other than a fracture at the Vertex that might be missed by CT scan and picked up by a plain film, skull x-ray is of no benefit when a CT scan is obtained.
- MRI or magnetic resonance angiography is of ancillary value for suspected ligamentous and vascular injuries. Bony injuries are far better visualized using CT scan.
- In addition to a complete neurological examination, baseline laboratory analyses, and tetanus toxoid (Where appropriate, as in open skull fractures, the diagnostic workup for fractures is radiological).

### **Management**

- Medical Therapy

Adults with simple linear fractures who are neurologically intact do not require any intervention and may even be discharged home safely and asked to return if symptomatic.

Simple depressed fractures in neurologically intact person are treated expectantly. These depressed fractures heal well and smooth out with time, without elevation.

Seizure medications are recommended if the chance of developing seizures is higher than 20%. Open fractures, if contaminated, may require antibiotics in addition to tetanus toxoid.

- Surgical Therapy

The role of surgery is limited in the management of skull fractures. Surgery to elevate depressed skull fractures is preferred in

- Open (compound) fractures.
- Depressed fracture thickness > of calvaria and

- Those fractures not meeting criteria for non-surgical management.

- Non-surgical management

May be considered if

1. There is no evidence of dural penetration and no significant intracranial hematoma
2. Depression <1cm
3. No frontal sinus involvement
4. No wound infection or gross contamination
5. No gross cosmetic deformity

### **Indications for CT in TBI (Traumatic Brain Injury)**

1. Witnessed LOC (Loss of Consciousness)
2. Definite Amnesia
3. Disorientation with a Glasgow coma scale score (GCS) of 13-15
4. GCS <15 at 2 hours after injury
5. Suspected open or depressed fracture
6. Any signs of basilar skull # - Raccoon eye, Battle sign, Otorrhea or Rhinorrhea
7. Vomiting of > 2 episodes
8. Age > 65 years
9. LOC for > 5 mins
10. Mechanism of injury

### **1.3 Mandatory documents- For healthcare providers**

Following documents should be uploaded by the concerned hospital staff at the time of pre-authorization and claims submission:

<b>Mandatory document</b>	<b>Depressed Fracture</b>
<b>i. At the time of Pre-authorization</b>	
a. Clinical Notes detailing the injury	Yes
b. CT report of brain	Yes
<b>ii. At the time of claim submission</b>	
a. Detailed Indoor case papers	Yes

b. Post Procedure clinical photograph showing scar	Yes
c. Post Procedure CT report with film	Yes
d. Detailed Procedure/ Operative notes	Yes
e. Detailed discharge summary	Yes

## **PART II: GUIDELINES FOR PROCESSING TEAM**

## **PART III: GUIDELINES FOR IT**

3.1 **Objective:** To enable setting up of cross check mechanisms/rule engines within the IT platform (TMS) to ensure compliance with STGs and to prevent fraud / abuse of the Health Benefit Package.

3.2 **Below mentioned are the scenarios where a provision would be built in TMS for pop-ups:**

1. Was CT brain report of patient suggestive of depressed fracture?

Till the time the functionality is being developed, the processing doctors shall check the above manually.

## **References**

1. Trauma Protocol and Head Injury, Protocol for emergency and trauma care, Govt Medical College Thiruvananthapuram. Pg: 15-22