

## Guidance document for processing PM-JAY packages

### Cervical spine fixation including odontoid

**Procedures covered: 1**

**Specialty: Orthopedics**

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Procedure price (INR)
Cervical spine fixation including odontoid	Cervical spine fixation including odontoid	New package	SB021A	20,000 + Price of Implant

**ALOS: 7 days**

**Minimum qualification of the treating doctor:**

**Essential:** Diploma in Orthopedics with 10 years of experience

**Desirable:** MS/DNB/Equivalent in Orthopedics

**Special empanelment criteria/linkage to empanelment module:** None

**Disclaimer:**

For monitoring and administering the claim management process of **Cervical spine fixation including odontoid** 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 section 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.

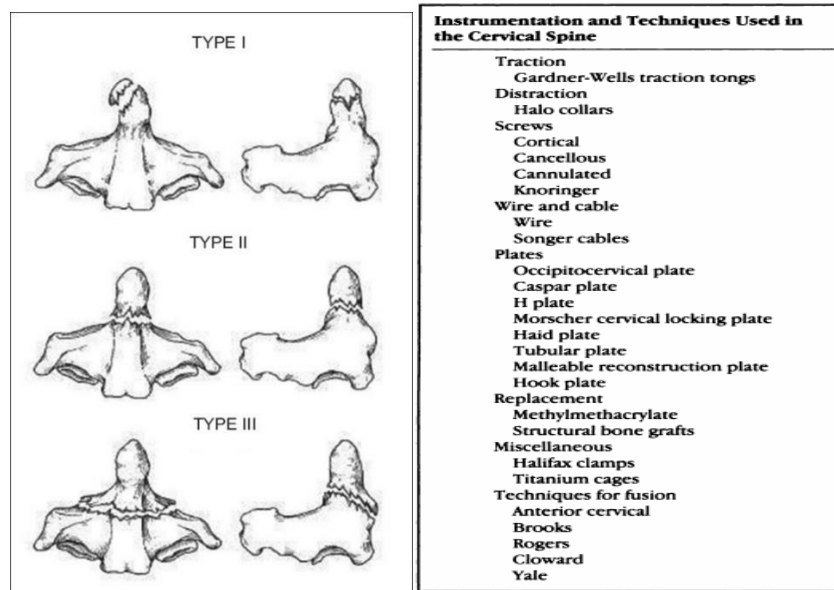
### **1.2 Clinical key pointers:**

#### **Indications for cervical spine fixation**

- Spinal fixation is used for stabilization of the spine after fracture, for reconstruction after resection of tumors or destruction from Infection, and for treatment of congenital and

acquired spinal diseases, such as scoliosis, spondylolisthesis, spinal stenosis, disk disease, and inflammatory and degenerative arthritis.

- Metallic devices are subject to fatigue failure; they are unable to withstand the stresses of weight bearing, flexion, extension, and lateral bending for prolonged periods and eventually loosen or break if bone fusion does not occur.
- The primary nontraumatic indications for stabilization surgery are scoliosis, degenerative instability, and neural decompression. However, surgical intervention is only indicated in a carefully selected percentage of these cases.
- There are three different types of odontoid process fracture characterized by the anatomic location of the fracture line. This is called the Anderson and D'Alonzo classification. Type I fractures occur very rarely, and type II is the most common.
  - a) **Type I:** avulsion fracture of the apex. Stable injuries.
  - b) **Type II:** fracture through the base of the dens, at the junction of the odontoid base and the body of C2. Often unstable injuries.
  - c) **Type III:** fracture extends into the body of the axis. Usually stable injuries.



### Indications for Odontoid fixation

- Surgical indications reported in literature are poly-trauma, neurological deficit, symptomatic non-union (myelopathy) and unstable non-union. Patients presenting aforementioned risk factors for non-union are also considered as being indicative for surgery.
- **Anterior odontoid screw fixation:** one or 2 screws are inserted via the anterior-inferior corner of the C2-endplate to stabilize the fracture. Reports say that the Type IIB fracture (anterior-superior to posterior-inferior) have the most ideal geometry for this technique.

- **Posterior C1-C2 fusion:** different techniques are reported. Gallie wiring technique, Magerl C1-C2 transarticular screw fixation and Harms posterior C1 lateral mass and C2 pars screws.

### 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:

Mandatory document	Cervical spine fixation including odontoid
<b>i. At the time of Pre-authorization</b>	
a. Clinical notes with planned line of treatment	Yes
b. X-ray labelled with patient ID, date and side (Left/ Right) - affected part	Yes
<b>ii. At the time of claim submission</b>	
a. Detailed Indoor Case Papers (ICPs)	Yes
b. Post-procedure X-ray labelled with patient ID, date and side (Left/ Right) - affected part	Yes
c. Detailed Procedure / Operative Notes	Yes
d. Detailed Discharge summary	Yes
e. Invoice and barcode of implant	Yes

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

### **PART III: GUIDELINES FOR TRANSACTION MANAGEMENT SYSTEM (TMS)**

**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:**

- Does the clinical notes and X-ray Type of fracture (Simple/Compound) clearly given? Yes
- Does the Discharge summary rule out further complications and suggested any enhanced treatments? Yes

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

### **References:**



1. Elgafy, Hossein, et al. "Treatment of displaced type II odontoid fractures in elderly patients." *Am J Orthop (Belle Mead NJ)* 38.8 (2009): 410-416.
2. Torretti, Joel A., and Dilip K. Sengupta. "Cervical spine trauma." *Indian Journal of Orthopaedics* 41.4 (2007): 255.
3. Harrop, James S., et al. "Catastrophic Failure of Conservatively Treated Odontoid Fracture in the Elderly." *JHN Journal* 7.2 (2012): 4.
4. Wilberger, Jack. "Neurotrauma and Critical Care of the Spine." (2009): 585.
5. Slone, Richard M., M. MacMillan, and W. J. Montgomery. "Spinal fixation. Part 1. Principles, basic hardware, and fixation techniques for the cervical spine." *Radiographics* 13.2 (1993): 341-356.