

Guidance document for processing PM-JAY packages

Extradural Spinal Tumors

Procedure covered: 2

Specialty: Neurosurgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Spine - Extradural Tumor	Spine - Extradural Tumor	S800030	SN041A	30,000
Spine - Extradural Tumor	Spine - Extradural Tumor with fixation	S800031	SN041B	30,000 + Implant cost

ALOS: 7 days

Minimum qualification of the treating doctor:

Essential: MCh/DNB/Equivalent (in Neurosurgery); MS/DNB/Equivalent (in Orthopedics)

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital

Disclaimer:

For monitoring and administering the claim management process of **Spine - Extradural Tumor**, 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:

Extradural tumors are usually metastatic and most often arise in the vertebral bodies. Metastatic lesions can cause spinal cord compression either by epidural growth that results in extrinsic spinal cord or cauda equina compression or, less frequently, by intradural invasion. The most common tumors arising in the extradural space are metastases. Several uncommon primary tumors can also arise in the extradural space.

- Metastases **(Kindly consider booking the relevant package for the relevant guidelines)**

Metastatic spine tumor is more common than primary spine tumors. Spine is the most common location for skeletal metastasis. Approximately 5-10% of all cancer patients develop spine metastasis. The three most common primary tumors are prostate cancer, breast cancer, and lung cancer.

- Primary tumors of the spine

Several uncommon primary tumors can also arise in the extradural space. Their incidence is 2.5-8.5 per 100,000 per year. They are more common in men than women.

Clinical Diagnosis

Symptoms:

- Pain -nonspecific, local, progressive, increasing at night
- Radicular pain
- Paraesthesia
- Limb paresis
- Spinal deformity
- Bowel/bladder disturbance
- In children - limp, fever, bruising are red flags

Sign:

- Spinal tenderness
- Spine deformity - Sensory disturbance
- Limb weakness
- Other myelopathy features

Investigations:

- Part of surgical fitness work up: CBC, LFT, RFT, BT, CT, PT, INR, Serum Electrolytes, HIV, HBsAG, HCV etc.
- Radiological investigation
 - X-ray
 - CT scan for bone details
 - MRI scan with contrast
 - Bone scan
- Metastasis workup
 - Chest X-ray
 - Mammography



- Ultrasound of abdomen
- Blood tests -PSA
- CT/MRI of other regions if symptomatic

Biopsy (for initial assessment or if surgery is not anticipated)

- CT/C-arm guided biopsy

PRIMARY SPINE TUMOURS (Kindly consider booking under relevant AB PMJAY packages for relevant guidelines)

Benign:

- Giant cell tumor
- Osteoid osteoma
- Osteblastoma
- Hemangioma
- Osteochondroma
- Chondroma
- Chondroblastoma

Malignant:

- Myeloma
- Lymphoma
- Chondrosarcoma
- Chordoma
- Osteosarcoma
- Ewing's tumor
- Hemangioendothelioma
- Fibrosarcoma
- Malignant giant cell tumor

Tumor staging of primary benign tumors:

- Stage-1 Latent/inactive
 - Asymptomatic lesions bordered by true capsule
 - These are slow growing
 - No treatment is required unless palliative for decompression or stabilization
- Stage-2 Active
 - Slow growing with mild symptoms
 - Tumor is bordered by thin capsule and a layer of reactive tissue
 - Bone scan positive



- Intralesional excision leads to low recurrence rate
- Adjuvant therapy reduced the recurrence further (RT/Cryotherapy/ embolization)
- Stage-3 Aggressive
 - Rapidly growing benign cells
 - Capsule is thin, discontinuous or absent
 - Adjacent tissue invasion occurs with hypervascularity
 - Bone scan strongly positive
 - En bloc excision is the treatment of choice

MALIGNANT PRIMARY SPINE TUMOURS (staging)

- Stage-1 Low grade malignant tumors
 - 1A-Tumour is within the vertebra
 - B-Tumor invades the paravertebral compartments
- Stage-2 High grade rapidly growing. Skip metastasis can occur
 - 2A-slow epidural invasion
 - 2B-Rapid epidural growth
- Stage-3 Distant Metastasis

Treatment:

1. Hemangioma

- Extremely radiosensitive - Low dose radiation if symptomatic
- Embolization
- In case of instability - surgical resection and stabilization

2. Osteoid Osteoma

- NSAIDS for pain
- In case of no pain relief/NSAIDS contraindication/progressive deformity-surgery (Burr down excision or marginal resection)

3. Osteoblastoma

- Varied levels of aggression
- Surgical resection

4. Giant cell tumor

- Borderline malignant
- Enbloc resection +/- Embolization

5. Chondroblastoma

- Curettage or excision

MALIGNANT PRIMARY SPINE TUMOUR

1. Osteosarcoma

- Wide or marginal excision + Radiotherapy/Chemotherapy

2. Chondrosarcoma

- Surgical excision Proton beam therapy

3. Ewing's sarcoma

- Surgical excision + radiotherapy + chemotherapy

4. Chordoma

- Wide excision + Proton Beam therapy

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	Spine - Extradural Tumor	Spine - Extradural Tumor with fixation
i. At the time of Pre-authorization		
Clinical notes including evaluation findings	Yes	Yes
Based on Etiology CT/ MRI Brain/Spine Positron emission tomography (PET) scan Chest X-ray Mammography Ultrasound of abdomen Bone scan CT/MRI of other regions if symptomatic	Yes	Yes
Indication of implant requirement	No	Yes
Planned line of treatment	Yes	Yes
ii. At the time of claim submission		
Detailed Indoor case papers (ICPs)	Yes	Yes
Detailed Procedure / operative notes	Yes	Yes
Intra-operative photographs (optional)	Yes	Yes
Post-op CT Spine	Yes	Yes
Implant details (barcode/invoice)	No	Yes
Histopathological/Biopsy report	Yes	Yes

Detailed discharge summary	Yes	Yes
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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:

- I. Was clinical presentation, grading and radiological investigations indicative of surgery? Yes

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

References

1. Standard Treatment Guidelines. Neurosurgery. Department of Health and Family Welfare. Government of Karnataka. Suvarna Arogya Suraksha Trust.
2. William C Welch, David Schiff, Peter C Gerszten. Spinal cord tumors - UpToDate. Last updated - September 2020.