



## Guidance document for processing PM-JAY packages

### Spinal Canal Stenosis

#### Procedures covered: 1

#### Specialty: Neurosurgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Surgery for Spinal Canal Stenosis	Surgery for Spinal Canal Stenosis	S800027	SN037A	40,000

**ALOS:** 5 Days

**Minimum qualification of the treating doctor:**

**Essential:** MCh/DNB/Equivalent (in Neurosurgery), MS/Equivalent (in Orthopedic Surgery)

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

#### Disclaimer:

For monitoring and administering the claim management process of **Spinal Canal Stenosis**, 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:**

Spinal stenosis is an abnormal narrowing of the spinal canal that can occur in the cervical, thoracic, and lumbar regions. Symptoms of spinal stenosis are caused by spinal cord or root compression. The major reason for the stenosis is degeneration of the spinal components, including the intervertebral disk and ligamentum flavum, which is more common in older patients.

#### **Common Clinical presentation**

- severe backache with or without leg pain
- unable to walk



- numbness & weakness of both legs
- tingling sensation

### **Surgical indications**

- Failure of non-operative management
- Significant decrease in quality of life
- Progression of deformity/imbalance
- Correlation between radiographic and clinical finding
- Preoperative surgical planning

### **Levels of treatment**

- Decompression
- Correction
- Fixation
- Fusion

## **CERVICAL SPINAL STENOSIS**

- Cervical spinal stenosis may be congenital or, more commonly, acquired
- Congenital stenosis is a skeletal hypoplasia in which the dimensions of the cervical canal are reduced
- Acquired spinal stenosis results from degenerative changes that most commonly originate at the disk space level, occurring most frequently in the sixth decade of life

### **Clinical evaluation**

Most importantly, the data from imaging studies must be integrated with the clinical symptoms, which may include impaired gait and numbness and incoordination of the hands, as well as with various clinical signs, such as hyperreflexia, atrophy of intrinsic hand muscles, a positive Hoffmann's phenomenon, and upward-moving plantar responses (Babinski's reflex)

### **Management (Surgical)**

- Spinal Instability – lateral mass fixation
- Decompressive laminectomy
- Laminoplasty
- Discectomy - if there are any herniated or bulging discs

## **THORACIC SPINAL STENOSIS**

- Isolated symptomatic stenosis of the thoracic spine is rare in comparison with cervical or lumbar spinal stenosis.
- Degenerative changes such as hypertrophy of the facet joints are most common in the lower third of the thoracic spine.
- A congenitally narrow thoracic spinal canal may predispose affected patients to symptomatic stenosis with progressive degeneration. Other causes of thoracic spinal stenosis include dislocation of fracture fragments, disk herniations, and ossification of the posterior longitudinal ligament.

### **Clinical Evaluation**

Timely diagnosis of symptomatic thoracic stenosis may be difficult. Compression of both the conus medullaris and caudal nerve roots in the lower thoracic spine may cause mixed upper and lower motoneuron symptoms, including pain, neurogenic claudication, sensory symptoms, gait disturbances, spasms, spastic paraparesis, and bladder and bowel dysfunction. Clinical examination may reveal hyperreflexia or clonus, a positive Babinski's reflex, or sensory loss corresponding to the level of the pathology.

### **Management (Surgical)**

Decompression of the thoracic spine is technically demanding, with a significant risk of complications. The choice of surgical technique, whether posterior or anterior decompression or a combination of both, depends on the location of the predominant pathology.

## **LUMBAR SPINAL STENOSIS**

- The causes of lumbar spinal stenosis (LSS) are traditionally classified as acquired (degenerative) or congenital (developmental).
- The prevalence of the degenerative form increases with age: among people ages 60 to 69 years, mild stenosis is found in approximately 50% and more severe findings in almost 20% of asymptomatic subjects.
- The narrowing of the spinal canal in degenerative LSS is usually due to changes in the ligamentum flavum, marked hypertrophy of the facet joints, or a combination of both.

### **Clinical Evaluation**

- In patients with congenital LSS, symptoms usually arise at an earlier age and with less severe degenerative changes than in patients with degenerative LSS. A congenitally narrowed spinal canal is a distinctive feature of skeletal dysplasias such as achondroplasia or diastrophic dysplasia.
- The clinical course of LSS symptoms is characterized by gradual onset and slow progression; rapid or catastrophic progression of symptoms is rare.
- Patients usually present with intermittent neurogenic claudication or a more well-defined radicular pain. Typical intermittent neurogenic claudication consists of pain, numbness, or tingling sensation in the buttocks or lower extremities when walking or standing; symptom relief is experienced with sitting or bending forward.
- Patients with LSS may also complain of paresthesias and chilliness in their lower extremities, as well as restless legs syndrome or leg cramps.
- The symptom complex most commonly associated with LSS is absence of pain when sitting, improvement of symptoms with bending forward, and presence of bilateral buttock or leg pain.
- Patients with LSS frequently experience severe low back pain.

## Management

The choice of either conservative or operative treatment of symptomatic LSS depends on the severity of the symptoms, not on the degree of radiographic findings.

### Surgical

- Laminotomy
- Discectomy (microdiscectomy)

### Indications for surgery

- persistent disabling pain lasting more than 6 weeks that have failed nonoperative options (and epidural injections)
- progressive and significant weakness
- cauda equina syndrome

## 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	Spinal Canal Stenosis
i. At the time of Pre-authorization	

Clinical notes including clinical evaluation findings	Yes
X-ray/CT/MRI Spine	Yes
<b>Optional</b> Electromyogram (EMG)	Yes
Planned line of treatment	Yes
<b>ii. At the time of claim submission</b>	
Detailed Indoor case papers (ICPs)	Yes
X ray – if instrumentation or fusion is done (optional)	Yes
Detailed Procedure / operative notes	Yes
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:**

- I. Was radiographic imaging and clinical finding indicative of surgery?

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

#### **References**

1. Clinical protocol guidelines. Mahatma Jyotiba Phule Jan Arogya yojana. Maharashtra <https://www.jeevandayee.gov.in/MJPJAY/RGJAYDocuments/NEUROSURGERY.pdf>
2. H. Richard Winn. Youmans & Winn. Neurological Surgery. Seventh Edition. Elsevier
3. <https://www.igeaneuro.com/specialties/new-jersey-spinal-surgery/cervical-spinal-stenosis/>