



Guidance document for processing PM-JAY packages

Hiatus Hernia/ Fundoplication

Procedures covered: 4

Specialty: General/Pediatric Surgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Hiatus Hernia Repair / Fundoplication	Hiatus Hernia Repair - Open	S100078	SG053A	23,500
Hiatus Hernia Repair / Fundoplication	Hiatus Hernia Repair - Lap.	S100184	SG053B	23,500
Hiatus Hernia Repair / Fundoplication	Fundoplication - Open	S100059	SG053C	23,500
Hiatus Hernia Repair / Fundoplication	Fundoplication - Lap.	S100059	SG053D	23,500

ALOS: 5-7 Days

Minimum qualification of the treating doctor:

Essential: MS/ DNB/ Equivalent (in General Surgery), MCh/DNB/Equivalent (in Pediatric Surgery, Surgical Gastroenterology)

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital; laparoscopic facility for laparoscopic procedures

Disclaimer:

For monitoring and administering the claim management process of **Hiatus Hernia Repair / Fundoplication**, 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:

Herniation of the stomach through the esophageal hiatus can occur as:

- Type 1 – sliding or oesophagogastric hernia, in which the gastroesophageal junction slides into the thorax
- Type 2 – Paraesophageal or Rolling, in which a portion of the stomach (usually the fundus) is insinuated next to the esophagus inside the gastroesophageal junction in the hiatus
- Type 3 – Mixed hernia, combination of sliding and paraesophageal types. The fundus or body of the stomach or both have herniated into the chest; the gastro-oesophageal junction is also herniated into the chest, but rests below the herniated stomach
- Type 4 – Giant hiatus hernia (massive herniation), Occurrence of any type of hiatus hernia along with herniation of one or more other organs, such as colon, small bowel, omentum, and spleen.

Common symptoms

1. Symptoms due to reflux: Regurgitation and heart burn are the two most common symptoms
2. Symptoms due to complications: Dysphagia, odynophagia, haematemesis and melaena
3. Nonoesophageal symptoms: Asthma and chest pain

Sliding Hiatus Hernia (Type I)

- ☐ 90% of esophageal hernias
- ☐ associated with aging, weakening of musculofascial structure, and increased intra-abdominal pressure (e.g. obesity, pregnancy)
- ☐ **Clinical Presentation**
 - Heartburn - after meals and at night
 - Relief with sitting, standing, water, antacids
 - Regurgitation of gastric contents (often acidic) into esophagus
 - Complications: esophagitis, chronic occult GI blood loss with anemia, ulceration, dysphagia due to lower esophageal stricture, barrett's esophagus, adenocarcinoma, pneumonia (aspiration)
- ☐ **Differential diagnosis:** cholelithiasis, diverticulitis, peptic ulcer, achalasia, MI, angina
- ☐ **Investigations**
 - Gastroscopy with biopsy → document type and extent of tissue damage, rule out Barrett's esophagus and cancer
 - 24hour esophageal ph monitoring → often used if atypical presentation, gives information about frequency and duration of acid reflux, correlation of symptoms with signs



- Esophageal manometry —> detects decreased lower esophageal sphincter pressure; may diagnose motility disorder
- Upper GI series or barium swallow
- Chest x-ray globular shadow with air-fluid level over cardiac silhouette, visible shadow posterior mediastinum on lateral view

☐ **Treatment**

- Conservative management
- Medical management - Medical treatment is not directed at the hernia but at the gastroesophageal reflux, unless failure of medical therapy prompts correction of the hernia at the time of fundoplication
- Surgical (< 10%)
 - Nissen fundoplication or laparoscopic Nissen where fundus of stomach is wrapped around the lower esophageal sphincter (LES)
 - 90% success rate
 - indications for surgery
 - complications of sliding hernia or gastroesophageal reflux (especially stricture, severe ulceration, fibrosis)
 - symptoms refractory to conservative and medical treatment
 - complete mechanical failure of LES

Paraesophageal Hiatus Hernia (Type II)

☐ A paraesophageal hernia can be an isolated congenital anomaly or associated with gastric volvulus, or it may be encountered after fundoplication for gastroesophageal reflux, especially if the edges of a dilated esophageal diaphragmatic hiatus have not been approximated

☐ 10% of esophageal hernias

☐ **Clinical Presentation**

- asymptomatic
- Fullness after eating and upper abdominal pain are the usual symptoms
- heartburn/reflux uncommon
- pressure sensation in lower chest, dysphagia

☐ **Complications**

- hemorrhage
- incarceration, obstruction, and strangulation
- palpitations rarely

☐ **Treatment**

- surgery in almost every case to prevent severe complications
- procedure: reduce hernia, suture to posterior rectus sheath (gastropexy), close defect in hiatus
- excellent results

Fundoplication procedures

Important variables of a fundoplication procedure include approach (transthoracic or abdominal), portion of stomach wall used (anterior and posterior or anterior only), combination with other procedures (eg, vagotomy or gastroplasty), the looseness of the wrap, the completeness of the wrap, and the length of the wrap.

1. Nissen (360 degree or complete) fundoplication – Anti reflux procedure especially associated with hiatus hernia
2. Rosetti-Nissen fundoplication — A common modification is a 360-degree fundic wrap without division of the short gastric vessels (Rosetti-Nissen).
3. Partial fundoplication — A partial 270-degree posterior wrap (Toupet) is used for patients with severe associated motor abnormalities.

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	Hiatus Hernia Repair (Open/Lap)	Fundoplication (Open/Lap)
i. At the time of Pre-authorization		
Clinical notes	Yes	Yes
Clinical Evaluation	Yes	Yes
Upper gastrointestinal series/barium swallow	Yes	Yes
Upper endoscopy	Yes	Yes
24-hr pH-monitoring	Yes	Yes
Oesophageal manometry	Yes	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
Detailed discharge summary	Yes	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:

- a. Was clinical presentation and imaging indicative of surgery? Yes

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

References

1. K Rajgopal Shenoy, Anitha Shenoy (Nileshwar). Manipal Manual of Surgery. Fourth Edition.
2. S. Gallinger, Gordon Buduhan, Sam Minor. General Surgery. MCCQE 2000 Review Notes and Lecture Series.
3. Peter J Kahrilas. Hiatus hernia – UpToDate. last updated: January, 2019
4. BMJ Best Practices. Hiatus Hernia. Last updated: January, 2019