



## Guidance document for processing PM-JAY packages

### Duplication cysts

**Procedures covered: 2**

**Specialty: Duplication cyst excision (Pediatric Surgery)**

**Operation for Duplication of Intestine (General/Pediatric Surgery)**

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Duplication Cyst Excision	Duplication Cyst Excision	S1400017	SS006A	20,000/-
Operation for Duplication of Intestine	Operation for Duplication of Intestine	S100030	SG015A	18,000/-

**ALOS: 5 Days**

**Minimum qualification of the treating doctor:**

**Essential:** MCh/DNB/Equivalent (Pediatric Surgery/ Surgical Gastroenterology)

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

#### **Disclaimer:**

For monitoring and administering the claim management process of **Duplication cyst excision/ operation for duplication of intestine**, 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:**

Alimentary tract duplications are congenital malformations that may be found anywhere from mouth to anus. The most common duplication is cystic (80%) and located on the mesenteric aspect of the small or large intestine whereas rest are tubular (20%). Duplications are lined by alimentary tract mucosa and usually share a common smooth muscle wall and blood supply with

the adjacent gut. Cystic duplications may be associated with spinal cord and vertebral anomalies, and tubular duplications may be associated with urinary tract, spine, and central nervous system anomalies.

Types of duplications:

1. foregut duplication cysts
  2. small bowel duplication cysts
  3. large bowel duplication cysts
- Foregut duplication cysts are categorized on the basis of their embryonic origin into esophageal, bronchogenic, and neuroenteric cysts
  - Gastrointestinal tract duplication cysts most commonly occur in the ileum, esophagus, and colon

**Presenting symptoms:**

Patients may present with a mass or with symptoms related to the location and size of the cyst. Endoscopic ultrasound (EUS) has been widely used as a modality for the evaluation and diagnosis of duplication cysts. For the most part, the choice of operative approach is determined by the anatomy of the duplication and the extent to which it integrates with normal anatomic structures.

**Esophageal duplication cyst**

- Single fluid filled structures that do not communicate with esophageal lumen. Most commonly present in mediastinum. Presenting as mediastinal mass or sub mucosal lesion on endoscopy.
- Compression of structures adjacent to the tracheobronchial tree present as nonproductive cough, stridor, tachypnea, cyanosis, wheezing or chest pain.
- Structures adjacent to the esophageal wall presenting as dysphagia, chest pain, vomiting, or regurgitation
- Rarely symptoms such as cardiac arrhythmias, retrosternal or thoracic back pain, cyst rupture or bleeding leading to secondary mediastinitis.

Diagnosis:

- Chest X-ray PA
- CT/MRI
- Endoscopic ultrasound  $\pm$  fine needle aspiration (EUS with FNA)

Treatment:

- Surgical removal or enucleation

### **Gastric duplication cyst**

- Gastric duplication cysts can be asymptomatic but can also develop symptoms such as diffuse abdominal pain, epigastric pain, vomiting, weight loss, gastric outlet obstruction, ulcerated antral mass, or failure to thrive.

Diagnosis:

- EUS guided FNA

Treatment:

- Surgical removal

### **Bronchogenic duplication cysts:**

- Symptomatically, patients with bronchogenic duplication cysts can present with dysphagia, chest pain, cough, shortness of breath, or abdominal pain

Diagnosis:

- Endoscopic ultrasound  $\pm$  fine needle aspiration (EUS with FNA)

Treatment:

- Surgical removal or enucleation

### **Small bowel duplication cyst:**

- Presenting symptoms: abdominal pain and vomiting
- Small bowel duplication cysts can be associated with all three small bowel subtypes: Duodenal, jejunal, and ileal. Jejunal duplications are the most common, followed by ileal and duodenal duplications.
  - Duodenal cysts can cause other complications such as pancreatitis, infection, weight loss, and GI bleeding from ulceration of the ectopic gastric mucosa within the cyst
  - Jejunal duplication cyst can cause abdominal bloating, constipation, intussusception, volvulus, and partial small bowel obstruction
  - Ileal duplication cysts may be asymptomatic or present with abdominal pain, small bowel obstruction, a palpable abdominal mass, or hematochezia

Diagnosis:

- CT/ MRI

- EUS

Treatment:

- Surgical resection

### Large bowel/rectal duplication cysts

- Colonic cysts can be asymptomatic or present as abdominal pain to the point of an acute abdomen, obstruction, and/or bleeding.

Diagnosis:

- CT
- EUS
- Contrast enema

Treatment

- Surgical resection

### 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	Duplication cyst excision	Operation for duplication of intestine
<b>i. At the time of Pre-authorization</b>		
Clinical notes	Yes	Yes
CT/MRI	Yes	Yes
Endoscopic ultrasound ± fine needle aspiration	Yes	Yes
Planned line of treatment	Yes	Yes
<b>ii. At the time of claim submission</b>		
Detailed Indoor case papers (ICPs)	Yes	Yes
Detailed operative/procedure notes	Yes	Yes
Intra-operative photographs (optional)	Yes	Yes
Detailed discharge summary	Yes	Yes
Histopathological examination	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:**

- I. Was the imaging (Endoscopic Ultrasound/CT/MRI) confirmatory of diagnosis? Yes

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

#### **References:**

1. Liu R, Adler DG. Duplication cysts: Diagnosis, management, and the role of endoscopic ultrasound. *Endosc Ultrasound*. 2014;3(3):152-160. doi:10.4103/2303-9027.138783
2. Devendra K Gupta (Editor). Pediatric Surgery-Diagnosis and Management, First Edition 2008. Chapter 58: Alimentary tract duplications; Pg:659
3. Patiño Mayer J, Bettolli M. Alimentary tract duplications in newborns and children: diagnostic aspects and the role of laparoscopic treatment. *World J Gastroenterol*. 2014;20(39):14263-14271. doi:10.3748/wjg.v20.i39.14263
4. Sangüesa Nebot C, Llorens Salvador R, Carazo Palacios E, Picó Aliaga S, Ibañez Pradas V. Enteric duplication cysts in children: varied presentations, varied imaging findings. *Insights Imaging*. 2018;9(6):1097-1106. doi:10.1007/s13244-018-0660-z
5. Iyer CP, Mahour GH. Duplications of the alimentary tract in infants and children. *J Pediatr Surg*. 1995;30(9):1267-1270. doi:10.1016/0022-3468(95)90482-4