



## Guidance Document for Processing PM-JAY Packages

### SPLENORENAL ANASTOMOSIS

Package Covered: 01  
Speciality: General Surgery

AB PM-JAY Package Name	AB PM-JAY Procedure Name	Procedure Code HBP 1.0.	Procedure Code HBP 2.0	Procedure Code HBP 2022	Package Price
Splenorenal Anastomosis	Splenorenal Anastomosis	New Package	New Package	SG116A	NRP: Rs. 70,000/- Tier 3: Rs. 70,000/- Tier 2: Rs. 81,900/- Tier 1: Rs. 87,500/-

Average Length of Stay (ALOS): 7-10 Days

Minimum Qualification of the treating/operating doctor:

Essential: MS/MCh/DNB/Equivalent (General Surgery/GI Surgery)

Special Empanelment Criteria / Linkages to Empanelment Module: Care at Tertiary Hospital

#### Disclaimer:

NHA shall follow these guidelines to monitor and administer the claim management process of **Splenorenal Anastomosis**. This document has been prepared for the guidance of the PROCESSING TEAM and TRANSACTION MANAGEMENT SYSTEM of AB PM-JAY for the claims of the procedures mentioned above. However, this document doesn't provide any guidance on a patient's clinical and therapeutic management.

### PART I: Guidelines for Clinicians and Healthcare Providers

#### 1.1 Objective:

The objective of this section is to act as a guidance and a clinical decision support tool for the clinicians in deciding the line of treatment, planning clinical management of patients and decide referral of cases to the appropriate level of care (as required) for treatment of patients under PM-JAY and selection of the 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 PM-JAY.

#### 1.2 Clinical Key Pointers:

Splenorenal Anastomosis is a surgical procedure in which the splenic vein is detached from the portal venous system and reattached to the left renal vein. This surgery selectively reduces the pressure in the portal venous system and controls bleeding from varices due to portal hypertension.

**Portal hypertension** is a condition characterised by increased pressure in the portal venous system that carries blood from the gastrointestinal system to the liver. An increased portal pressure gradient determines portal hypertension, the difference in pressures between the portal venous pressure and the pressure within the Inferior Vena Cava or Hepatic vein. This pressure gradient usually is less than or equal to 5 mmHg. A pressure gradient of 6 mmHg or more suggests the presence of Portal Hypertension. When the pressure gradient is greater than 10 mmHg, Portal Hypertension becomes clinically significant. Portal hypertension develops when resistance to portal blood flow increases. This resistance often occurs within the liver, as in cirrhosis. It can also be outside of the liver, such as pre-hepatic in portal vein thrombosis or post-hepatic in the case of

constrictive pericarditis or Budd-Chiari syndrome. Identification of the level of resistance to portal blood flow allows the determination of the cause of portal hypertension. This condition is the most frequent cause of hospitalisation, variceal bleed, liver transplantation, and death in patients with cirrhosis.

**Oesophageal varices** are dilated submucosal distal oesophageal veins connecting the portal and systemic circulations. This happens due to portal hypertension (most commonly due to cirrhosis), resistance to portal blood flow, and increased portal venous blood inflow. The most common fatal complication of cirrhosis is variceal rupture; the severity of liver disease correlates with the presence of varices and the risk of bleeding.

The portal vein has a circulation of over 1500 ml/min of blood, and if there is an obstruction, this results in elevated portal venous pressure. The body's response to the increased venous pressure is the development of collaterals. These portosystemic collaterals divert blood from the portal venous system to the inferior and superior vena cava. At the same time, one important system is the gastroesophageal collaterals that drain into the azygos vein and lead to the development of oesophageal varices. When these varices get enlarged, they rupture, causing severe haemorrhage. After duodenal and gastric ulcers, bleeding from oesophageal varices is the third most common cause of upper GI bleeding.

**Splenorenal Anastomosis** helps control the bleeding in the varices without disturbing the portal perfusion of the liver. The splenic vein is separated from the portal vein and reconnected to the top of the left renal vein during the procedure. The left gastric vein is separated from the portal vein and ligated. The blood flows from the varices through the splenic vein to the left renal vein and empties into the Inferior Vena Cava (IVC). The blood flow to the liver is maintained through the portal vein.

### 1.3 Mandatory Documents – For Healthcare Providers:

Following documents should be uploaded by the concerned hospital staff during pre-authorisation and claims submission.

#### I. For Pre-Authorisation:

- a. Clinical Notes with history and examination and planned line of treatment
- b. Lab Investigations: Complete Blood Count (CBC) for Haemoglobin (Hb) and Platelets, Aspartate Aminotransferase (AST), Alanine Aminotransferase (ALT), Alkaline Phosphatase (ALP), Serum Bilirubin, Serum Albumin, Hepatitis Serology, Blood Urea Nitrogen (BUN), Coagulation Profile, Renal Function Test (RFT), Arterial Blood Gas (ABG)
- c. Oesophagogastroduodenoscopy Report
- d. USG Abdomen
- e. Doppler Sonography (Optional)
- f. CT / MRI Angiography (Optional)

#### II. For Claims Submission:

- a. Detailed Indoor Case Papers (ICPs)
- b. Detailed Operative/Procedure Notes
- c. Intra Operative Clinical Photograph
- d. Detailed Discharge Summary

### PART II: Guidelines for Processing Team

### PART III: Guidelines for IT

#### 3.1 Objective:



To enable the setting up of cross-check mechanisms/rule engines within the IT platform (TMS) to ensure compliance with STGs and 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 in case of Splenorenal Anastomoses:**

**a. At Pre-Authorisation (PPD):**

- i. Were the patient's clinical history/investigations indicative of the Procedure? Yes.
- ii. Whether the investigation reports confirm the diagnosis? Yes.

**b. At Claim Submission (CPD):**

- i. Whether detailed Operative/Procedure notes submitted? Yes.
- ii. Whether detailed Discharge Summary Submitted? Yes.

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

**References:**

1. Alex L Chang, Shimul A Shah, Management of Portal Hypertension, Shackelford's Surgery of Alimentary Tract, Eighth Edition, 2019.
2. J Michael Henderson, Distal Splenorenal Shunt, Blumgart's Surgery of the Liver, Pancreas and Biliary Tract, Fifth Edition, 2012
3. Orloff, Marshall. (2001). Portal Hypertension and Portacaval Shunt. 10.1016/B978-012655330-7/50051-4.