



Guidance document for processing PM-JAY packages

Portal Hypertension

Procedures covered: 2

Specialty: General Surgery

Package name	Package name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Portocaval Anastomosis	Portocaval Anastomosis	S100111	SG046A	31,500/-
Mesenteric Caval Anastomosis	Mesenteric Caval Anastomosis	S100100	SG047A	28,500/-

ALOS: 7 Days

Minimum qualification of the treating doctor:

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

Special empanelment criteria/linkage to empanelment module: Care at a tertiary hospital

Disclaimer:

For monitoring and administering the claim management process of **Portocaval Anastomosis/ Mesenteric Caval Anastomosis**, 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:

Portal hypertension is defined as elevated pressure in portal venous system due to resistance to portal blood flow. Pressure more than 10 mmHg is defined as portal hypertension. Portal hypertension is most commonly caused by cirrhosis, but can also be seen in portal vein obstruction from unknown causes.

Consequences of portal hypertension

- Esophageal varices
- Caput Medusae
- Hemorrhoids
- Ascites
- Splenomegaly

Treatment

I. Primary prophylaxis (before bleeding)

This is aimed at reducing portal pressure and consequently intravariceal pressure.

1. Pharmacotherapy
2. Endoscopic therapy: Endotherapy

II. Secondary prophylaxis

It means prevention of rebleeding following acute variceal haemorrhage. The different forms of treatment and their success depends upon various criteria (Modified Child's criteria)

III. Acute variceal haemorrhage

1. General measures
2. Measures to prevent encephalopathy
3. Pharmacotherapy for variceal bleeding
4. Endotherapy
 - Variceal banding
 - Sclerotherapy
 - Balloon tamponade
 - TIPSS (Transjugular intrahepatic portosystemic stent shunt)
5. Surgery
 - Devascularization procedure
 - Oesophageal transection
 - Gastric transection of Tanner
 - Sugiura and Futugawa operation
 - Portosystemic shunt procedures
 - Normal anatomy
 - Side-to-side portacaval shunt
 - End-to-side portacaval shunt
 - Mesocaval shunt
 - Distal splenorenal (Warren)shunt

Portosystemic Shunt procedures

Portal decompression is indicated in patients who have portal hypertension complicated by gastrointestinal hemorrhage from esophageal varices that are not effectively controlled with sclerotherapy injections. The procedure selected will depend upon the patency of the portal and splenic veins, the results of liver function studies, the amount of portal venous blood being shunted, and whether the patient is bleeding acutely.

Contraindication

- Jaundice
- ascites
- low albumin

I. Portacaval shunt

The primary indication for portacaval shunt is the control of massive upper-gastrointestinal hemorrhage from varices which cannot be controlled with endoscopic ablation or when transjugular intrahepatic portosystemic shunts (TIPS) are not available.

A. Side-to-side portacaval shunt

Indication: presence of portal hypertension with no evidence of a rise in pressure on the hepatic end of the temporarily occluded portal vein. If shunting is indicated to control ascites, the side-to-side shunt or double end-to-side shunt is usually preferred.

B. End-to-side portacaval shunt

Indication: Cirrhosis of liver due to schistosomiasis. This shunt is particularly indicated when there is no evidence of ascites and when portal blood flow is reversed in the hepatoportal direction, as determined by a rising pressure in the hepatic end of the temporarily occluded portal vein.

The end-to-side portacaval shunt is the procedure of choice in patients who have had a prior splenectomy, splenic vein thrombosis, or thrombosis of a splenorenal shunt and in those patients who have reversed flow in the portal vein.

II. Splenorenal shunt

In the presence of extrahepatic block of the portal vein, secondary hypersplenism, prior biliary surgery, and/or cavernomatous changes of the portal vein, a shunt between the splenic vein and left renal vein may be the procedure of choice, provided the splenic vein is patent and of adequate size.

A. Proximal splenorenal shunt

Indication: In this operation, spleen is removed.

B. Distal splenorenal (Warren) shunt

Indication: Extrahepatic portal hypertension with portal vein thrombosis, provided the splenic vein is dilated more than 1 cm, presence of normal liver function, marked splenomegaly, minimal hepatocellular disease.

III. Mesocaval shunt

Mesenteric caval shunt is necessary in patients who have undergone splenectomy and have either thrombosis or cavernomatous changes of the portal vein. The mesocaval shunt is advisable in patients with excessive bleeding at surgery from periportal or perisplenic vessels.

Indication:

1. Splenic vein is not dilated or thrombosed
2. Portal vein is thrombosed

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	Portocaval Anastomosis/ Mesenteric Caval Anastomosis
i. At the time of Pre-authorization	
Clinical notes including evaluation findings, indication of procedure and planned line of management	Yes
Complete blood count	Yes
Liver function tests	Yes
Oesophagogastroduodenoscopy	Yes
Splenoportovenography (optional)	Yes
USG/CT Abdomen	Yes
ii. At the time of claim submission	
Detailed Indoor case papers (ICPs) with treatment details	Yes
Detailed Procedure / operative notes	Yes
Intra-operative photographs (optional)	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 (PPD):

- I. Was clinical evaluation and imaging 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 GASTROINTESTINAL SURGERY. Ministry of Health & Family Welfare Govt. of India. <http://clinicalestablishments.gov.in/WriteReadData/2101.pdf>
2. Robert M. Zollinger, E. Christopher Ellison. 2011. Zollinger's atlas of surgical operations. Ninth Edition.
3. K Rajgopal Shenoy, Anitha Shenoy (Nileshwar). Manipal Manual of Surgery. Fourth Edition.