



Guidance document for processing PM-JAY packages

Repair of Renal Artery Stenosis

Procedures covered: 1

Specialty: CTVS/General Surgery/Pediatric Surgery/Urology

| Package name | Procedure name | HBP 2.0 code | HBP 2.1 code | Package price (INR) |
|---------------------------------|---------------------------------|--------------|--------------|----------------------|
| Repair of Renal Artery Stenosis | Repair of Renal Artery Stenosis | New Package | SG102A | 60,000+ Implant cost |

ALOS (In days): 10 days

Minimum qualification of the treating doctor:

Essential: M.Ch./DNB/equivalent (Cardiothoracic Surgery); MS/DNB/equivalent (Gen Surgery); DNB/MCh/equivalent (Pediatric surgery); DNB/MCh/equivalent (Urology)

Special empanelment criteria/linkage to empanelment module: Functional Cath Lab, Operation Theatre with anesthesia facilities.

Disclaimer:

For monitoring and administering the claim management process of **Repair of Renal Artery 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:

Renal Artery Stenosis:

Renal artery stenosis is the narrowing of the renal artery, due to atherosclerosis or, rarely, fibromuscular dysplasia leading to reduced renal perfusion. Atherosclerotic RAS mostly affects elderly patients with frequent renal parenchymal disease. Conversely, FMD predominantly affects women in their 30s or 40s with normal kidney function.

Indications for revascularization

- Presence of a hemodynamically significant renal artery stenosis
- Critical stenosis, or stenosis with deteriorating function, in single functioning kidney
- Resistant hypertension (uncontrolled hypertension despite use of three or more antihypertensive medications)
- Deteriorating renal function
- Fibromuscular dysplasia
- Associated heart failure ("flash" pulmonary edema)
- Renal insufficiency with serum creatinine >150 mmol/L.
- Glomerular Filtration Rate (GFR) < 50 mL/min (calculated according to the Cockcroft-Gault equation).
- Surgical revascularization of renal artery stenosis is indicated in cases of failed PTR or severe kinking.

Revascularization techniques

- 1) Angioplasty for non-ostial disease and fibromuscular dysplasia
- 2) Stent insertion for ostial atheromatous renal artery stenosis
- 3) Surgical reconstructive techniques include
 - **Renal artery bypass:** It is a surgical procedure that creates an alternate route (bypass) for blood to flow around a blockage in the renal arteries. The bypass may be made by harvesting a vein from the leg. It may also be made from prosthetic man-made material.
 - **Endarterectomy:** It is a surgical procedure in which a vascular surgeon removes the diseased inner lining of the artery and the plaque deposits.
 - **Renal reimplantation:** If the renal artery stenosis is ostial and vessel length is sufficient, then renal artery is transected and re-implanted into the aorta at a slightly lower level. The renal artery is spatulated and a portion of the aortic wall is removed as in renal artery bypass.

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 | Repair of Renal Artery Stenosis |
|--|---------------------------------|
| i. At the time of Pre-authorization | |
| a. Admission Notes comprising of history and examination with indications for the procedure | Yes |
| b. Duplex Ultrasound/Angiogram / CT Angiogram /MRA reports investigations confirming the diagnosis | Yes |
| ii. At the time of claim submission | |
| a. Detailed Indoor Case Papers (ICPs) | Yes |
| b. Detailed Procedure / Operative Notes | Yes |
| c. Intra-operative stills with date & patient ID, progress notes | Yes |
| d. Invoice/barcode of the implant (if used) | Yes |
| e. Post procedure Duplex Ultrasound/Angiogram / CT Angiogram /MRA reports | Yes |
| f. Detailed discharge summary | Yes |

PART II: GUIDELINES FOR PROCESSING TEAM

2.1 Objective: To provide guidance to the pre-authorization and claims processing team in ascertaining the medical necessity of procedure carried out vis a vis the patient's medical condition as evidenced by supporting documents/investigation reports etc., in deciding the admissibility and quantum of claim and compliance with mandatory documents by the hospital.

2.2 Following mandatory documents to be diligently reviewed by the pre-auth / claims processing personnel:

| Mandatory document | Repair of Renal Artery Stenosis |
|--|---------------------------------|
| i. At the time of pre-authorization processing- For pre-authorization processing doctor (PPD) | |
| a. Was the admission notes comprising of history and examination with indications for the procedure submitted? | Yes |
| b. Was the Duplex Ultrasound/Angiogram / CT Angiogram /MRA report suggestive of renal artery stenosis? | Yes |

| | |
|---|-----|
| ii. At the time of claim processing- For claims processing doctor (CPD) | |
| a. Are the detailed indoor case papers (ICPs) submitted? | Yes |
| b. Are the detailed Procedure / Operative notes submitted? | Yes |
| c. Was the post procedure Duplex Ultrasound/Angiogram / CT Angiogram /MRA report submitted? | Yes |
| d. Was the invoice/barcode of the implant used is submitted? (if used) | Yes |
| e. Is there a detailed discharge summary mentioning date of follow-up submitted? | Yes |

PART III: GUIDELINES FOR TRANSACTION MANAGEMENT SYSTEM (TMS)

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 patient Duplex Ultrasound/Angiogram / CT Angiogram /MRA report indicative of the procedure? Yes

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

References:

1. McLaughlin K, Jardine AG, Moss JG. Renal artery stenosis. BMJ. 2000 Apr 22;320(7242):1124–7.
2. Steuer J, Bergqvist D, Björck M. Surgical Renovascular Reconstruction for Renal Artery Stenosis and Aneurysm: Long-Term Durability and Survival. Eur J VascEndovascSurg Off J EurSocVasc Surg. 2019 Apr;57(4):562–8.
3. Rundback John H., Sacks David, Kent K. Craig, Cooper Christopher, Jones Daniel, Murphy Timothy, et al. Guidelines for the Reporting of Renal Artery Revascularization in Clinical Trials. Circulation. 2002 Sep 17;106(12):1572–85.
4. Colyer WR, Eltahawy E, Cooper CJ. Renal artery stenosis: Optimizing diagnosis and treatment. Prog Cardiovasc Dis. 2011;54(1):29–35.