



Guidance document for processing PM-JAY packages

Intracranial atherosclerotic disease (ICAD)

Procedure covered: 1

Specialty: Interventional Neuroradiology

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Intracranial balloon angioplasty with stenting	Intracranial balloon angioplasty with stenting	S900012	IN006A	1,60,000

ALOS: 5 days

Minimum qualification of the treating doctor:

Essential: DM/Equivalent (in Interventional Neuroradiology), MCh/DNB/Equivalent (in Neurosurgery)

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital with endovascular treatment facility

Disclaimer:

For monitoring and administering the claim management process of **Intracranial balloon angioplasty with stenting**, 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:

Intracranial atherosclerotic stenosis of the major arteries (intracranial internal carotid artery, middle cerebral artery, vertebral artery, and basilar artery) is the most common proximate mechanism of ischemic stroke worldwide.

Intracranial atherosclerotic disease (ICAD) remains an important cause for ischemic stroke, particularly in patients of black, Asian, or Hispanic origin as well as in diabetics. Risk factors



include insulin-dependent diabetes mellitus, hypercholesterolemia, hypertension, and cigarette smoking.

Four mechanisms for ischemic stroke secondary to intracranial atherosclerosis have been proposed:

- (1) hypoperfusion
- (2) thrombosis at the site of stenosis due to plaque rupture, intraplaque hemorrhage, or occlusive plaque growth
- (3) thromboembolic events distal to the site of stenosis
- (4) direct occlusion of small penetrating arteries at the site of the plaque

Management

Treatment options for atherosclerotic carotid artery disease include intracranial stent placement, medications, and surgery.

Endovascular management

- Endovascular management with angioplasty plus stenting is the rescue modality for high-grade stenosis (> 70%) in patients with failure of medical management (control hypertension, diabetes, de addiction, statins, antiplatelets)
- Stenting can be used as adjunct to balloon angioplasty to prevent plaque recoiling and to cover a plaque or an intimal flap. It may also reduce the chances of vessel dissection.

Complications

- Intimal dissection
- thrombus formation
- vessel rupture

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	Intracranial balloon angioplasty with stenting
i. At the time of Pre-authorization	

Clinical notes especially evaluation findings including neurological examination	Yes
CT/MRI Brain	Yes
Digital Subtraction Angiography (DSA)	Yes
Optional Transcranial doppler	Yes
Complete Blood Count, Prothrombin time (PT)/INR, Creatinine	Yes
Planned line of treatment	Yes
ii. At the time of claim submission	
Detailed Indoor case papers (ICPs)	Yes
Detailed Procedure / operative notes	Yes
Intra-operative photographs (optional)	Yes
Implant (stent, balloon) details invoice/barcode	Yes
Post procedure check angiogram	Yes
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:

2.2.1 At the time of pre-authorization processing- For pre-authorization processing doctor (PPD):

- Clinical notes - detailed history, signs & symptoms, evaluation findings, indication for procedure, and planned line of treatment?
- Did the patient present with hemiparesis, aphasia, dysarthria, loss of consciousness, cranial nerve palsy?
- Did imaging confirm the diagnosis?

2.2.2 At the time of claim processing- For claims processing doctor (CPD)

- Are the detailed ICPs with daily vitals and line of treatment?
- Are the detailed procedure / Operative Notes available?
- Was Digital subtraction Angiography (DSA) indicative of procedure?

- d. Implant (stent, balloon) invoice/barcode submitted?
- e. Did post-procedure check-angiogram show balloon/stent?
- f. Is the discharge summary with follow-up advise at the time of discharge?

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
- b. Was there an evidence of? No
 - a. Renal insufficiency
 - b. Non-correctable coagulopathy

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

References

1. Flusty B, de Havenon A, Prabhakaran S, Liebeskind DS, Yaghi S. Intracranial Atherosclerosis Treatment: Past, Present, and Future. Stroke. 2020 Mar;51(3):e49-e53. doi: 10.1161/STROKEAHA.119.028528. Epub 2020 Feb 10. PMID: 32078441; PMCID: PMC7041867.
2. Higashida RT, Meyers PM, Connors JJ 3rd, Sacks D, Strother CM, Barr JD, Wojak JC, Duckwiler GR. Intracranial angioplasty and stenting for cerebral atherosclerosis: a position statement of the American Society of Interventional and Therapeutic Neuroradiology, Society of Interventional Radiology, and the American Society of Neuroradiology. J Vasc Interv Radiol. 2009 Jul;20(7 Suppl):S312-6. doi: 10.1016/j.jvir.2009.04.007. PMID: 19560016.
3. George, Uttam & Kannath, Santhosh & Pandian, Jeyaraj. (2011). Current status of stenting in intracranial atherosclerotic disease: The story thus far and the way ahead. Neurology India. 59. 383-9. 10.4103/0028-3886.82744.
4. Standard Treatment Guidelines. Neurosurgery. Health & Family Welfare Department. Government of Maharashtra