



Guidance document for PM JAY package

Embolization - Arteriovenous Malformation (AVM) in the Limbs

Procedures covered: 1

Specialty: Cardiology

Package name	Procedure name	HBP 2.0 code	HBP 2.1 code	Package price (INR)
Embolization- Arteriovenous Malformation (AVM) in the Limbs	Embolization- Arteriovenous Malformation (AVM) in the Limbs	New Package	MC021A	Rs.40,600+ Implant Cost

ALOS: 2 days

Minimum qualification of the treating doctor:

Essential: DM/DNB/ equivalent (Cardiology)

Special empanelment criteria/linkage to empanelment module: Functional Cardiac Cath Lab

Disclaimer:

For monitoring and administering the claim management process of **Embolization- Arteriovenous Malformation (AVM) in the Limbs**, 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:

Arteriovenous Malformations (AVMs) are high-flow malformations that make up approximately 10% of malformations in the extremities. AVMs cause blood to bypass the capillaries, the smallest blood vessels, and pass directly from the arteries to the veins thus reducing the blood supply to surrounding tissue. Some AVMs cause no problems. Others may eventually burst and bleed causing serious problems.

Symptoms of peripheral AVMs include:

- Shortness of breath on exertion
- Bleeding
- Anaemia
- Swelling
- Lumps on the trunk and limbs
- Sores and ulcers on the skin
- Pain

Diagnostic Evaluation and Clinical Management of Arteriovenous Malformations (AVMs)

- Thorough history and physical examination.
- Signs or symptoms.
- Imaging Modalities – A variety of imaging modalities like Doppler Ultrasonography, CT, MRI and Angiography are used to evaluate the nature, extent, and complexity of the malformation and to help plan appropriate treatment.

Treatment

- Image-guided percutaneous and interventional treatments of vascular malformations are now widely accepted as first-line therapy when combined with a multidisciplinary approach to treatment.
- A variety of percutaneous sclerotic and trans-arterial embolizing agents can be advocated in numerous combinations, depending on location, severity and the extent of the malformations like absolute ethanol, bleomycin, 3% sodium tetradecyl sulfate (STS), polidocanol, ethanolamine oleate, n-butyl cyanoacrylate, polyvinyl alcohol foam and various types of coils and polymer microspheres.

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	Embolization- Arteriovenous Malformation (AVM) in the Limbs
i. At the time of Pre-authorization	
a. Clinical notes including history, vitals, physical examination findings with planned line of treatment	Yes
b. Doppler- Ultrasonography Report	Yes
c. Angiogram Report	Yes
ii. At the time of claim submission	
a. Detailed Indoor Case Papers	Yes
b. Detailed Procedure / Operative notes	Yes
c. Angiography image with coils/embolizing agents in place ¹ or Angiosomes image of blocked AVM	Yes
d. Invoice / bar code of used coil/embolizing agent	Yes
e. Detailed discharge summary	Yes

PART II: GUIDELINES FOR PROCESSING TEAM

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:

1. Was the patient Doppler report/ angiography report suggestive for AVM embolization? Yes

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

¹ Regarding the visibility of embolizing agent in the angiography - In case of coils they are clearly visible in the angiogram but embolizing agents will appear as a slightly opaque substance that block the flow. So, the presence of the embolizing agent can be confirmed based on the modified flow relative to pre-procedure.



References:

1. Madani H, Farrant J, Chhaya N, et al. Peripheral limb vascular malformations: an update of appropriate imaging and treatment options of a challenging condition. *Br J Radiol*. 2015;88(1047):20140406. doi:10.1259/bjr.20140406
2. Hyodoh H, Hori M, Akiba H, Tamakawa M, Hyodoh K, Hareyama M. Peripheral vascular malformations imaging, treatment approaches, and therapeutic issues. *Radiographics* 2005; 25(Suppl 1): S159–71. [[PubMed](#)] [[Google Scholar](#)]