

Guidance document for processing PM-JAY packages

Tissue Expander for disfigurement following burns, trauma, congenital deformity

Procedures covered: 3

Specialty: Plastic & Reconstructive Surgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price (INR)
Tissue Expander for disfigurement following burns / trauma / congenital deformity (including cost of expander / implant)	Tissue Expander for disfigurement following burns	S1000005	SP006A	50,000 + Price of Implant
	Tissue Expander for disfigurement following trauma	S1000005	SP006B	50,000 + Price of Implant
	Tissue Expander for disfigurement following congenital deformity	S1000005	SP006C	50,000 + Price of Implant

ALOS: 5 Days (Patient will require admission and operation twice ALOS for one admission-5 days)

Minimum qualification of the treating doctor:

Essential: MCh/DNB - Plastic Surgery/ Reconstructive Surgery

Special empanelment criteria/linkage to empanelment module: Care at Tertiary Hospital

Disclaimer:

For monitoring and administering the claim management process of **Tissue Expander for disfigurement following burns, trauma, congenital deformity**, 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 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: Proceed for Surgery only if diagnosis made is backed by clinical signs, symptoms, examination.

Soft tissue lost after trauma, burn leads to both functional loss and an esthetic problem, although various reconstructive methods ranging from split skin graft to a microvascular free flap can be used for covering the defect, these procedures leave a lot to be desired in large soft tissue defects. Moreover, it's not possible to perform secondary surgical procedures through these methods, color, texture, and adnexal characteristics of the tissue imported also may not match with the recipient site. These methods therefore do little, apart from achieving wound cover, to restore the self-image or functional recovery of the patient. **Tissue expansion** can replace skin and soft tissue loss without leaving a secondary defect in most instances.

Over the past 30 years Tissue expansion, has become more and more widespread, particularly in the fields of breast reconstruction, burn surgery, and pediatric plastic surgery. Also tissue expansion can be said to have revolutionized plastic surgery.

- The phenomenon of tissue expansion of the skin, soft tissues observed in pregnancy, slow-growing tumors, and fluid collections, where the local tissue expands and enlarges in response to the tension generated by the increased volume of the mass.
- It provides skin with a near-perfect match in color and texture, minimal donor site morbidity and scarring occur.
- It can be used in various parts of the body
 - to provide sensory function or adnexal characteristics to tissues. Ex: superior sensation of the skin flaps in breast reconstruction and the hair-bearing flaps designed in the treatment of male pattern baldness developed with expanders.
 - Expanded flaps are more resistant to bacterial invasion than random cutaneous flaps.

Indications:

- Burns, Injuries, Breast reconstruction
- The face, head, and neck - treatment of male pattern baldness, in every case, hair-bearing tissue can be expanded to approximately twice its size without a noticeable deficit in hair density.
- Unilateral forehead flaps were designed using expansion to reconstruct contralateral defects of the forehead and nose.
- Neck contractures managed with flaps developed with an implant in the supra platysmal plane.
- Correction of congenital microtia has been described, where tissue expanders were used to provide local skin coverage over the cartilaginous graft framework.
- Cleft lip repair

Management:

- Expanders are silicone envelopes that have self-sealing injection ports.
- At weekly intervals, saline is progressively injected through the port and passes into the expander, which enlarges, tension placed on the overlying and further adjacent tissues increase.

- Skin expansion allows the surgeon to generate additional amounts of precious tissue, to thin the flap, and to increase its vascularity.
- **Implants /Tissue expanders:** Surgeons will have multiple shapes and sizes of implants available while performing the surgery, Usually in breast reconstruction the decision as to which implant to use may be based on the pocket that is achieved during the dissection, but this can often be estimated preoperatively with BMI, breast shape and position, and comprehensive physical examination.

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	Tissue Expander for disfigurement following burns / trauma / congenital deformity
i. At the time of Pre-authorization	
a. Detailed clinical notes of original clinical event having led to disfigurement or confirming details/ Investigations of congenital event	Yes
b. Clinical Photograph of the affected part	Yes
ii. At the time of claim submission	
a. Detailed indoor case papers	Yes
b. Invoice/barcode of the expander used	Yes
c. Post procedure clinical photograph of the affected part	Yes
d. Detailed procedure/Operative notes	Yes
e. 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	Tissue Expander for disfigurement following burns / trauma / congenital deformity
i. At the time of pre-authorization processing- For pre-authorization processing doctor (PPD)	

a. Detailed Clinical notes of original clinical event having led to disfigurement or confirming details/ Investigations of congenital event submitted?	Yes
b. Was the Clinical photograph of the affected part submitted?	Yes
ii. At the time of claim processing- For claims processing doctor (CPD)	
a. Was the Indoor case papers and treatment given submitted?	Yes
b. Was the Invoice/barcode of expander used submitted?	Yes
c. Were the detailed procedure/Operative notes submitted?	
d. Was the Post procedure clinical photograph of the affected part submitted?	Yes
e. Was the discharge summary report submitted?	Yes

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:

- Was the clinical notes of original clinical event having led to disfigurement details indicative of procedure? Yes

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

References:

- Dogra, Bharat B., et al. "Tissue expansion: A simple technique for complex traumatic soft tissue defects." International surgery 92.1 (2007): 37.
- Cherry, George W., et al. "Increased survival and vascularity of random-pattern skin flaps elevated in controlled, expanded skin." Plastic and reconstructive surgery 72.5 (1983): 680-687.
- Hallock, Geoffrey G. "Tissue expansion techniques to minimize morbidity of the anterolateral thigh perforator flap donor site." Journal of reconstructive microsurgery 29.09 (2013): 565-570.
- Cunha, Marcelo Sacramento, et al. "Tissue expander complications in plastic surgery: a 10-year experience." Revista do Hospital das Clínicas 57.3 (2002): 93-97.
- Regan, John-Paul, and Adam D. Schaffner. "Breast Reconstruction Expander Implant." StatPearls [Internet] (2020).