



## Guidance Document for processing PM-JAY packages

### Emergency tendons repair ± Peripheral Nerve repair / reconstructive surgery

Procedure covered: 1

Specialty: Polytrauma, Orthopedics, Neurosurgery, General Surgery

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Package price	ALOS
Emergency tendons repair ± Peripheral Nerve repair/ reconstructive surgery	Emergency tendons repair ± Peripheral Nerve repair/ reconstructive surgery	S600012	ST008A	30,000	10 days

#### Minimum qualification of the treating doctor:

**Essential:** MS/DNB/Equivalent (General Surgery); MS/DNB/Equivalent (Orthopedic surgery); MCh/DNB/Equivalent (Neurosurgery / Reconstructive Surgery)

**Special empanelment criteria/linkage to empanelment module:** Functional Operational Theatre

#### Disclaimer:

For monitoring and administering the claim management process of **Emergency tendons repair ± Peripheral Nerve repair/ reconstructive surgery**, 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 document 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:

#### TENDON INJURIES

- Patient usually presents with c/o inability to bend or extend a finger

- To be ruled out in cuts involving fingers, palm and dorsum of hand, wrist and forearm
- Mechanism of injury to be noted
- Look whether it's a clean or contaminated wound
- Give thorough wound wash after administering adequate analgesia
- FDS, FDP, FPL, FCR, FCU to be tested and zones of flexor tendon injury to be noted
- APL, EPB, ECRL, ERCB, EPL, EI, EDC, EDM, EhCU to be tested and zones of extensor tendon injury to be noted
- Vascularity of the affected finger/hand to be documented by capillary refill or pinprick
- X-ray of the involved part to rule out fractures and foreign body
- Associated vascular or nerve injury to be documented
- Provide prophylactic antibiotics
- Advice strict hand elevation

### **Management**

- In all clean cuts with underlying tendon injury, early repair from Emergency OT is advised, for optimal results.
- In contaminated wounds, after adequate wound debridement, wounds to be re-assessed after 48 hours for further decision making.
- In gross tissue loss and exposed tendons, adequate wound debridement followed by early soft tissue cover to be performed (local/regional/free flaps), and delayed repair of tendon injuries to be considered.

### **Nerve Plexus Injury (NPI)**

Obtaining a thorough history in a patient with possible NPI is necessary to identify the injury mechanism, associated fractures, and other concomitant trauma to the neck, shoulder, and chest cage.

Careful inspection of the patient can provide important clues to the extent of the injury. Considerable bruising and swelling may indicate deep trauma with possible vascular injury, which can be confirmed by evaluating the radial, ulnar, and brachial pulses. A detailed neurologic examination is warranted to ascertain the location of the lesion.

Findings on initial examination are supplemented with advanced imaging and electrophysiological evaluation to determine the prognosis of neurologic recovery further.

There are few contraindications to brachial plexus surgery. In general, surgery should be avoided if the patient is not medically or psychologically cleared for surgery or if local wounds or infections obstruct the surgical approach.

## Management

- The surgical timing for the treatment of nerve plexus injury remains a topic of controversy.
- Urgent surgical exploration of the plexus is indicated if a root avulsion or laceration injury to the plexus is suspected or in cases of open injury, retained foreign body, or vascular injury requiring vessel repair.
- Sharp transections of the brachial plexus allow for primary repair of the transected ends to optimize nerve regeneration.
- Prognosis for low-energy mechanism Brachial plexus injury is more favorable compared to root avulsions or preganglionic injuries and can be treated conservatively to allow for spontaneous recovery.
- The patient should be closely followed with serial examinations, imaging studies, and electrophysiological testing.
- Delayed exploration may be indicated at three to six months after injury if the patient fails to regain neurologic function satisfactorily.

### 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	Emergency tendons repair ± Peripheral Nerve repair/ reconstructive surgery
<b>i. At the time of Pre-authorization</b>	
a. Clinical Notes detailing the injury and need for surgery	Yes
b. Medico legal case report/FIR copy of accident, if due to accident	Yes
c. <b>Optional</b> Nerve conduction velocity Electromyography (EMG) report MRI report	Yes
<b>ii. At the time of claim submission</b>	
a. Detailed Indoor case papers	Yes
b. Intra operative photograph (optional)	Yes

c. Detailed Procedure/ Operative notes	Yes
d. 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:**

<b>Mandatory document</b>	<b>Emergency tendons repair ± Peripheral Nerve repair/ reconstructive surgery</b>
<b>i. At the time of Pre-authorization</b>	
a. Clinical notes – details of accident, signs & symptoms, indication for surgery, and planned line of treatment?	Yes
b. Was the Medico legal report/ FIR copy of the accident submitted, if the injury was due to accident?	Yes
c. Was the nerve conductional velocity report/ EMG report/ MRI report submitted?	Optional
<b>ii. At the time of claim submission</b>	
a. Were the indoor case papers submitted?	Yes
b. Was the Intra-operative photo submitted?	Optional
c. Are the detailed Procedure/ Operation notes submitted?	Yes
d. Is there a Detailed Discharge Summary mentioning date of follow-up 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:**

1. Were the clinical notes suggestive of tendon injury with or without nerve repair? Yes



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

## **References**

1. Plastic Surgery, Protocol for emergency and trauma care, Govt Medical College Thiruvananthapuram. Pg: 69-70.
2. Luo TD, Levy ML, Li Z. Brachial Plexus Injuries. [Updated 2020 Aug 8]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK482305/>

## **Abbreviations**

FDS - flexor digitorum superficialis tendon  
FDP - Flexor digitorum profundus  
FPL - Flexor pollicis longus tendon  
FCR - flexor carpi radialis  
FCU - flexor carpi ulnaris  
APL - abductor pollicis longus  
EPB - Extensor pollicis brevis tendon  
ECRL - Extensor carpi radialis longus  
ERCB - Extensor carpi radialis brevis  
EPL - Extensor pollicis longus  
EI - extensor indicis  
EDC - extensor digitorum communis  
EDM - Extensor digiti minimi  
EhCU - Extensor carpi ulnaris  
OT – Operational theatre  
EMG – Electromyography  
FIR – First information report