

Guidance document for processing PM-JAY packages

Tension Band Wiring

Procedures covered: 1

Specialty: Orthopedics

Package name	Procedure name	HBP 1.0 code	HBP 2.0 code	Procedure price (INR)
Tension Band Wiring	Tension Band Wiring	S500081	SB030A	13,000 + Price of Implant

ALOS (In days): 3 days

Minimum qualification of the treating doctor:

Essential: Diploma in Orthopedics with 10 years of experience

Desirable: MS/DNB/Equivalent in Orthopedics

Special empanelment criteria/linkage to empanelment module: None

Disclaimer:

For monitoring and administering the claim management process of **Tension Band Wiring** 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:

Tension band wiring is a fixation technique which results in absolute stability. Interfragmentary compression and direct bone healing is obtained. Tension band wiring (TBW) remains the most widespread method for fracture osteosynthesis, of Olecranon fractures, Patella fracture, elbow, Femur. It is the most common operative technique for the internal fixation of olecranon fractures.

- **Principle in Tension band wiring:** To bring interfragmentary compression on a bending fracture a "tension band" is applied on the "tension side" of the bone.
- The "tension band" may be wire, plate.

Indications:

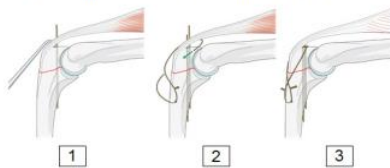
- Wires are used as tension band most commonly in patella and olecranon fractures. Other indications are tuberosity of the humerus, of the lateral and medial malleoli, and of the trochanter of the femur.

Technique

A simple transverse fracture can be held accurately by:

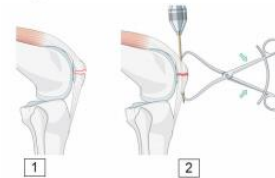
- 1) Inserting a K-wire through the fracture line.
- 2) Inserting a second K-wire parallel to the first one to prevent fragment rotation.
- 3) The tension band is provided by a figure-of-eight looped wire over the tension surface, anchored around the K-wire ends proximally, and a transverse hole through the ulna distally. The wire is tightened equally on both sides by twisting to apply compression.

Once fixed, any pull on the triceps muscle increases the dynamic compression across the fracture site.

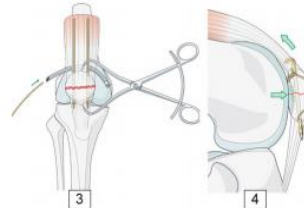


Technique

- 1) Provided the fracture is a simple transverse fracture and there is no fragmentation of the deep articular cortex.
- 2) It can be reduced with pointed forceps and held with two parallel K-wires.



- 3) A wire, inserted around the ends of these wires (deep to the quadriceps tendon), crossed over the front of the patella, and then around the lower ends of the K-wires is tightened to provide compression. This is achieved by tightening a loop on each limb of the wire.
- 4) The pull of the quadriceps then increases dynamic compression across the fracture as the knee flexes and extends.



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	Tension band wiring
i. At the time of Pre-authorization	
a. Clinical notes with history, signs, symptoms, evaluation findings, indication for procedure, planned line of management and advice for admission	Yes
b. X-ray labelled with patient ID, date and side (Left/ Right) - affected limb	Yes
ii. At the time of claim submission	
a. Detailed Indoor case papers (ICPs)	Yes

b. Post-op X-ray labelled with patient ID, date and side (Left/ Right) - affected limb	Yes
c. Invoice and barcode of implant	Yes
d. Detailed Procedure / Operative Notes	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:**

- I. Does the Post Procedure X Ray show the Implant/Wire/Plate and type of Fracture? – Yes

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

References:

1. Karlsson, Magnus K., et al. "Fractures of the olecranon: a 15-to 25-year followup of 73 patients." *Clinical Orthopaedics and Related Research*® 403 (2002): 205-212.
2. Christof A. Müller. Tension Band Fixation. [online] Aotrauma.aofoundation.org. Available at: <https://aotrauma.aofoundation.org>.