

Decompression Cannula for Depressed Tibia Plateau Fracture

Surgical Technique

ecompression Cannula



Decompression Cannula

Depressed fractures such as tibial plateau fractures are challenging to treat.¹ The surgical management includes percutaneous anatomic reduction and stable fixation to ensure early mobilization and minimal surgical trauma. The Arthrex decompression and delivery cannula enables a convenient reduction of depressed fractures and delivery of an injectable mixture of autologous or synthetic bone filler.

Key Features



Decompression Cannula:

- Diameter 8 G allows minimally invasive procedure
- Bended shape provides convenient access and reduction of the compression
- Luer lock connection allows universal attachment to syringes and dosing cartridges
- Flexible trocar atraumatic reduction and eliminates lost injection volume



Bending Tool:

- May be used with 8 G (external diameter 4.3 mm) and 10 G (external diameter 3.5 mm) cannulas
- Allows reshaping (from a distance of 1 cm from the cannula tip) of up to 45°
- Angle scale: 0°-90° for estimation of the bending angle
- Length scale: 20 mm-100 mm for estimation of the distance between the bend and cannula tip



*The radiopacity of Quickset is slightly higher than the trabecular bone and must be taken into account during radiographic analysis.

Quickset[™] Macroporous, Injectable, Hardening Resorbable Calcium Phosphate Cement:

- Closed mixing system
- Easy application
- Radiopaque*
- Compressive strength of 24 MPa

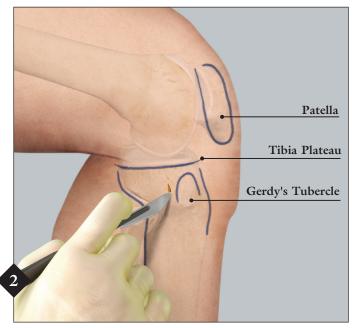
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Depressed Tibia Plateau Fracture (Schatzker Type II and III)

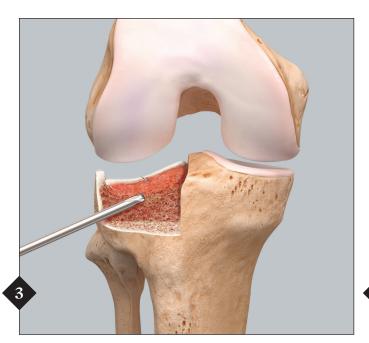


For the treatment of a depressed tibia plateau fracture, place the patient in supine position with the knee flexed. Assure an orthogonal view of the tibia plateau under fluoroscopic guidance.



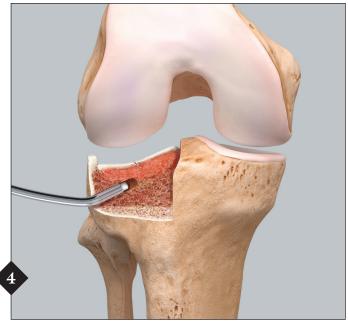
Mark all main anatomic structures and then perform a small stab incision posterior to the Gerdy's tubercle around 1.5 cm below the joint line.

Note: Evaluate position using fluoroscopy before the incision.

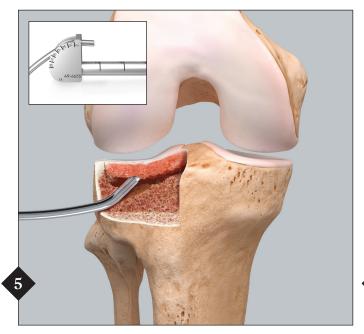


Use a 5 mm drill to drill through the cortical bone.

For a guided approach, utilize the side-release RetroConstruction™ handle with tibial ACL marking hook and 2.4 mm guide pin sleeve to triangulate the location of the fracture. Use fluoroscopy throughout the procedure to confirm position. Advance a 2.4 mm guide pin through the lesion, remove the marking hook, then drill a 5 mm cannulated drill through the cortical bone.

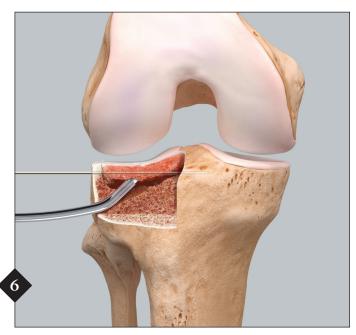


Following the removal of the drill, insert the decompression cannula. Engage the cannula by slightly turning and pushing until it is positioned below the fracture.

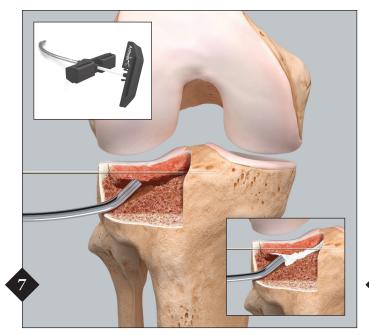


Under fluoroscopic guidance, reduce the compression fracture and restore the original tibia plateau by elevating the depressed region back into place. Apply the elevating force at the center of the depression. Optional: The cannula bending can be adjusted by using the cannula bending tool (AR-6655).

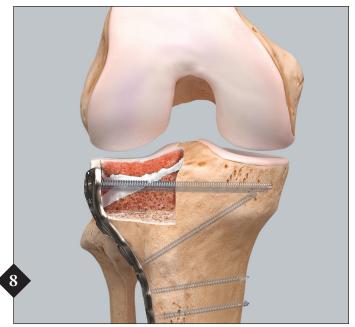
Note: The cannula is delivered in the maximum bend so only reducing of the bending should be done.



Optional: Temporary stabilization is achieved using one or two K-wires introduced 1 cm below the joint surface.



For injection purposes, remove the trocar of the compression fracture cannula by turning the inner part of the handle 90° and then slowly pulling. While removing the trocar, make sure the cannula stays in place under the restored tibia plateau.



Fixation with screws or plate or in combination is then completed. May require repositioning of K-wires.

Note: Use fluoroscopy to assure that there is no leakage into the articular space.

Ordering Information	
Product Description	Item Number
Decompression Cannula	ABS-3300
Quickset™ calcium-phosphate cement, 8 cc	ABS-3008
Optional Accessories	
Drill Tip Guide Pin, 2.4 mm x 311 mm	AR-1250-L
Drill Tip Guide Pin, 2.4 mm x 311 mm, sterile	AR-1250LS
Cannulated Headed Reamer, 5 mm-11 mm	AR-1405-LP to AR-1411LI
Cannulated Headed Reamer, 5 mm-11 mm	AR-1405 to AR-1411
RetroConstruction [™] Drill Guide Handle, side release	AR-1510HR
Insert, 2.4 mm	AR-1204F-241
Femoral ACL, footprint	AR-1510F-01
Hook, multi-use	AR-1510M
Tissue Protector	AR-2840-2
Cannula Bending Tool	AR-6655

Please note that not all products advertised in this surgical technique guide may be available in all countries. Please ask the Arthrex Customer Service or your local Arthrex Representative before ordering to see if the desired product is available for delivery.



This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's Directions For Use. Postoperative management is patient specific and dependent on the treating professional's assessment. Individual results will vary and not all patients will experience the same postoperative activity level or outcomes.

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