



Bicondylar tibial plateau fracture case study

PERI-LOC[◇]
Periarticular Locked
Plating System

PERI-LOC[◇] VLP[◇]
Variable-Angle
Locked Plating System

JET-X[◇] BAR
Unilateral External Fixator System

Tibial plateau fracture management

Patient information

49 year old male, found on the sidewalk, unable to walk. Reportedly struck by a motor vehicle.

Right bicondylar tibial plateau fracture and compartment syndrome

Implants used

JET-X° 10.5mm Carbon Fiber Bars, Stainless Steel Half Pins and Freedom Clamps

PERI-LOC° VLP° 3.5mm Posteromedial Proximal Tibia Plate, 7 hole

PERI-LOC 3.5mm Lateral Proximal Tibia Plate, 8 hole

PERI-LOC and PERI-LOC VLP 3.5mm Locking and Non-locking Screws

Case background information

The patient was found on the sidewalk unable to ambulate. He reported being struck by a motor vehicle while riding his bicycle. He developed compartment syndrome. The fracture was extensive and required bicondylar fixation. PERI-LOC VLP is low profile and provides buttress support for the medial plateau. The low profile nature minimizes soft tissue irritation (tendon structures) in that area. The PERI-LOC 3.5mm Lateral Proximal Tibia Plate was selected for its strength and ability to support the tibial diaphysis.



AP view



Lateral view



CT scan

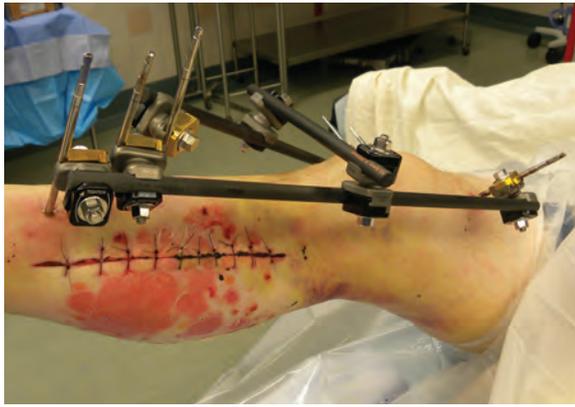


Figure 1

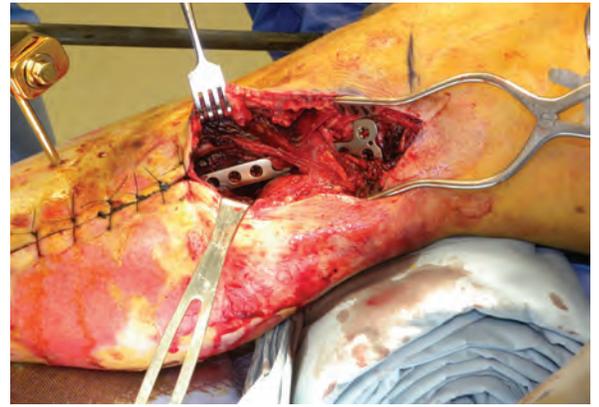


Figure 2

Procedural notes

Procedures

Two-incision fasciotomy, application of external fixator and subsequent ORIF right tibial plateau fracture

Patient Positioning – Supine

A two-incision fasciotomy was performed on the right leg on the day of presentation. The patient was then placed in a large JET-X[®] External Fixator which spans across the knee, using 10.5mm Bars, Freedom Clamps and stainless steel half pins. Three days later, he returned to the OR for fasciotomy closure (**Figure 1**).

Eight days later, the patient underwent definitive stabilization of the tibial plateau fracture and removal of the external fixator (**Figure 2**).

Both medial and lateral incisions were made, proximal to the fasciotomy incisions. Provisional fixation was achieved by the use of Kirschner wires. The PERI-LOC[®] VLP[®] Posteromedial Plate was used to stabilize and buttress the fracture. The PERI-LOC Lateral Proximal Tibia Plate was then placed and provisionally fixed (**Figure 3**). Fluoroscopic imaging confirmed plate positioning. Internal fixation concluded with the insertion of an independent screw proximal to the PERI-LOC VLP Posteromedial Plate for additional subchondral bone support. Locking and non-locking screws were placed throughout each plate and the provisional wires were removed (**Figure 4**).



Figure 3



Figure 4



Post-operative X-Rays

Surgeon quote

“The versatility of the PERI-LOC system combined with the low profile, variable-angled locking technology and precontoured nature of PERI-LOC VLP Plates helps tremendously in complex fracture management.”

Results

The patient returned home following the procedure and has been stable on follow-up.

Implant details

PERI-LOC® VLP® 3.5mm Posteromedial Proximal Tibia Plate

- Contoured to provide a stable buttress platform for fractures of the medial tibial plateau
- Consistent 2.0mm plate thickness (7 hole plate)
- Scallops proximal to the plate for independent lag screw placement

PERI-LOC 3.5mm Lateral Proximal Tibia Plate

- Posterior tilt allows for screw placement parallel to joint
- 3° bend in plate shaft to match tibial diaphysis
- Scallops proximal to the plate for independent lag screw placement

PERI-LOC and PERI-LOC VLP 3.5mm locking and non-locking screws

JET-X® 10.5mm Carbon Fiber Bars, Stainless Steel Half Pins and Freedom Clamps

- Freedom clamps provide the ability to angle pins up to 50°
- 10.5mm bars are stronger than smaller bars, eliminating the need to double stack for stability



PERI-LOC VLP 3.5mm
Posteromedial
Proximal Tibia Plate



PERI-LOC 3.5mm
Lateral Proximal
Tibia Plate



JET-X 10.5mm Carbon
Fiber Bars, Stainless
Steel Half Pins and
Freedom Clamps

Case study participants



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