Postoperative Treatment of Tibia Fracture Intramedullary Fixation—Dr. Trueblood

**Indications:**

**Technique:** The patient is positioned supine on the operating table with a trochanteric bump to prevent external rotation of the hip. If needed, a sterile tourniquet may be employed but this is rarely necessary. The knee is flexed over a sterile, radiolucent triangle and an anterior, midline incision is made over the patellar tendon. The epitenon is identified, split, and elevated medially and laterally before opening the medial patellar retinaculum. The anterior tibial plateau is visualized and a guidewire is placed at the bare area between the intermeniscal ligaments, behind the patellar tendon but anterior to the joint surface. A cannulated drill is used to open the near cortex and a guidewire is placed through this window, across the fracture site, and into the mid-point of the distal tibia, just above the ankle's joint surface. The tibia is then reamed sequentially up to light chatter and an appropriately sized intramedullary device is placed across the fracture site. The guidewire is removed and proximal and distal interlocking screws are placed under x-ray guidance. Fractures may usually be compressed by obtaining distal fixation first and then backslapping the rod before proximal fixation is placed. Wounds are then irrigated and closed in layers, taking extra care to obtain a watertight repair of the patellar tendon and the epitenon with absorbable suture. Wounds are cleaned and dried. Sterile dressings are applied. The patient is placed into a posterior mold splint, extubated, and transported to the PACU in stable condition. Patients are typically observed overnight for pain control and neurovascular monitoring given the rare but real risk of compartment syndrome.

**Postoperative Care:**

- **Weight bearing:** Non-weight bearing to operative extremity
- **ROM:** Knee AROM/ PROM encouraged. Isometric quad exercises.
- **Anticoagulation:** 2 weeks of lovenox/ arixtra.
- **Pain Control:** Norco 7.5- 10, 1-2 tabs po q4 prn
  - Oxycodone 5 mg po 1 hour after norco if pain still >6/10
  - Morphine 4mg iv q2 pm pain after norco and oxycodone

Splint and dressing remains on until followup in office.
Follow-ups scheduled at 2, 6, and 12 weeks.

**1st postoperative visit 2 weeks after surgery**—
- Wound Assessment. Remove stitches and apply steris.
- Patient transitions into CAM Boot
- X-ray: 2 views of tibia/fibula out of plaster.
- Pain assessment. Refill medications as needed.
Weight bearing status in CAM boot.

- Midshaft fractures: Weight bearing as tolerated with crutch assistance.
- Distal or Proximal ⅓ of shaft fractures: 20# weight bearing (foot-flat weight bearing)