

December 2009 Case Study: Comminuted Tibial Plateau Fracture

Erin S. Hart, NP

History of Present Illness: The patient is a morbidly obese 38 year old male who was referred to the ortho trauma service via an outside hospital. He was involved in a motorcycle crash earlier this am when by report a car pulled out in front of him and he was unable to stop. He was wearing a helmet at the time of the crash. He was transported via EMS to a local hospital where x-rays revealed a complex comminuted tibial plateau fracture and a stable C1 arch fracture. He presented to the emergency room here in moderate distress due to pain.

Past Medical History: Morbid obesity (BMI approx 50), Hypertension

Past Surgical History: Previous Cervical Spine C3-C5 fusion/arthrodesis for fracture s/p fall from motorcycle approx 5 years ago

Medications: Afrin QD (reports that he uses approx 1-2 bottles/day)

Allergies: NKDA

Physical Examination: PE: HR 94 SBP 180/90

A&O x 3, conversant and answering questions

Very anxious

Clutching bottle of Afrin

BUE skin abrasions, knuckle abrasions

No tenderness, deformity, erythema, edema, induration or ecchymosis

B shoulders have a painful PROM, limited AROM, poor effort due to emotional status

Arms and forearms are soft

C5-T1 Sensor and Motor intact

1+ Biceps Triceps and BR reflexes

EPL FPL EIP EDC FDP FDI fire

2+ radial pulses

BLE skin chronic changes, left anterior tibial skin lesion

Right proximal tibia pain and tenderness

Right tibia soft

No pain with passive motion of toes and ankle

Saph Sural DPN SPN MPN LPN SITLT

EHL FHL GS TA Fire

1+ DP pulses bilaterally, strongly dopplerable R DP pulse in splint

Brief Impression/Plan: The patient was taken to the OR for an Open Reduction & Internal fixation (ORIF) of the comminuted displaced tibial plateau fracture. He did require an anterior extensor compartment fasciotomy given concerns over possible compartment syndrome. He was placed into a VAC dressing for 5 days post-operatively because the incision could not be closed due to significant swelling after injury and surgery. He was discharged home on POD #5, he was placed into a Bledsoe knee brace and will be NWB for a total of 6 weeks post-op.

Radiographs Pre-Post Op:



