

# Wheeling through Trauma: Surgical Narrative of a Bicycle Mishap Rescue

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## Introduction

A 32-year-old male was admitted to the emergency department after a bicycle accident that resulted in a traumatic brain injury and a complex perineal laceration. Additionally, the patient sustained significant injuries to the left lower limb, including a Schatzker VI tibial plateau fracture, necessitating immediate and multidisciplinary medical attention.



## Case Report

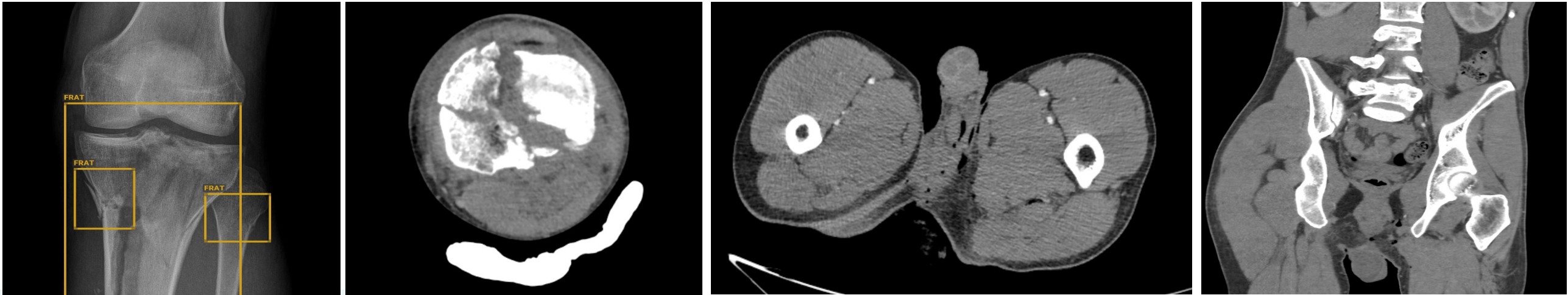
The patient reported wearing a helmet during the accident and complained of excruciating pain and restricted movement in the left lower limb. The clinical evaluation revealed a profound perineal laceration with extensive subcutaneous tissue loss, demanding prompt surgical intervention for effective management.

### Examination Findings:

- Edema of the left lower limb at the knee and tibial region, with associated pain and difficulty moving the limb.
- Large injury between the scrotal area and the anal sphincter region with loss of subcutaneous tissue.

### Imaging:

- X-ray: Schatzker VI fracture of the tibial plateaus.
- CT of Left Knee and Leg: comminuted metaphyseal fracture of the proximal tibia involving the femorotibial and proximal tibiofibular articular surfaces. Notable displacement of approximately 19 mm at the lateral tibial plateau, with a maximum separation of around 25 mm (measured in the coronal plane).
- AngioCT: Presence of gas bubbles in the perineal region, adjacent to the left cavernous body and the medial aspect of the left thigh, correlating with physical examination. No recent fracture traces identified in the abdominal and pelvic regions.



### Surgical Intervention:

- Correction of perineal laceration.

#### •Intraoperative Findings:

Perineal laceration with superficial involvement of external sphincter muscle fibers at 3 o'clock.  
Cavity at 3 o'clock with approximately 10 cm of extension.  
Intact rectum throughout its length.  
Integrity of the internal sphincter confirmed.  
Multitubular drain placed in the cavity.  
Approximation of external sphincter muscle fibers with Vicryl 3/0.



### Additional Procedures:

- Transarticular osteotaxia of the left knee: Schatzker VI tibial plateau fracture.
- Definitive osteosynthesis performed after achieving suitable skin conditions.



## Results

The patient demonstrated a successful recovery post-surgery, with restored lower limb functionality and no evidence of gastrointestinal or genitourinary complications. Long-term follow-up affirmed the effective healing of the perineal laceration without any adverse outcomes, emphasizing the success of the integrated approach in managing complex traumatic injuries.

This case highlights the critical role of timely and meticulous surgical intervention in addressing severe perineal lacerations alongside complex lower limb injuries, affirming the importance of comprehensive care and multidisciplinary collaboration in achieving favorable patient outcomes following traumatic accidents.