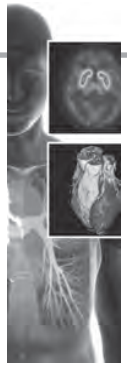

Pathologic fracture of the proximal tibia through a bone graft donor site

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A 45-year-old female was brought to the emergency department (ED) via EMS for sudden pain and bleeding of the left knee. Eleven days previously the patient underwent an anterior tibial bone harvest for alveolar bone reconstruction. On presentation, the patient reported that while climbing stairs she experienced a 'popping' sensation and severe pain while her left leg was in full extension. This was followed by expression of blood and clots from the incision site. On exam, there was mild swelling of the left knee and a 2 cm surgical incision over the anterior proximal tibia. On account of her pain and recent surgery, portable left knee x-rays were obtained, which showed a comminuted fracture of the proximal third of the tibial shaft, AO Type C classification (Figures 1A and 1B). Orthopedic surgery was consulted and took the patient to the operating room later the same day. Post-operative imaging (Figures 1C and 1D) revealed the original site of bone harvest (arrow). The orthopedic surgeon at our facility reported that tibial bone harvests should not be taken directly over the proximal anterior tibia due to subsequent biomechanical instability; instead, these grafts are usually taken from the 'soft' spot of the tibia at the lateroproximal epicondyle (known as Gerdy's tubercle) and angled inferomedially. The patient tolerated her surgery well and will follow up with orthopedic surgery for continued care.

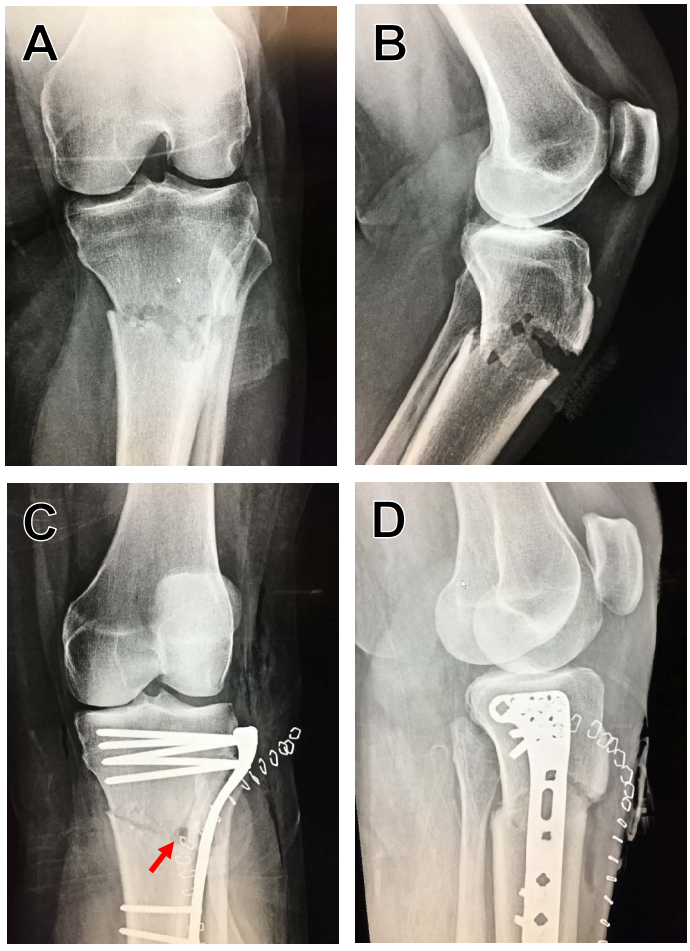

FIGURE 1.