

Case Description

A young male presented to the hospital after being struck by a motor vehicle. He was pinned between 2 car bumpers and struck by a third car, crushing both legs. Patient had an extensive 2-month long hospital course, which included treatment for a wound abscess status post external drains. Unfortunately, the patient’s leg could not be salvaged, and he required a left above-the-knee amputation (AKA).

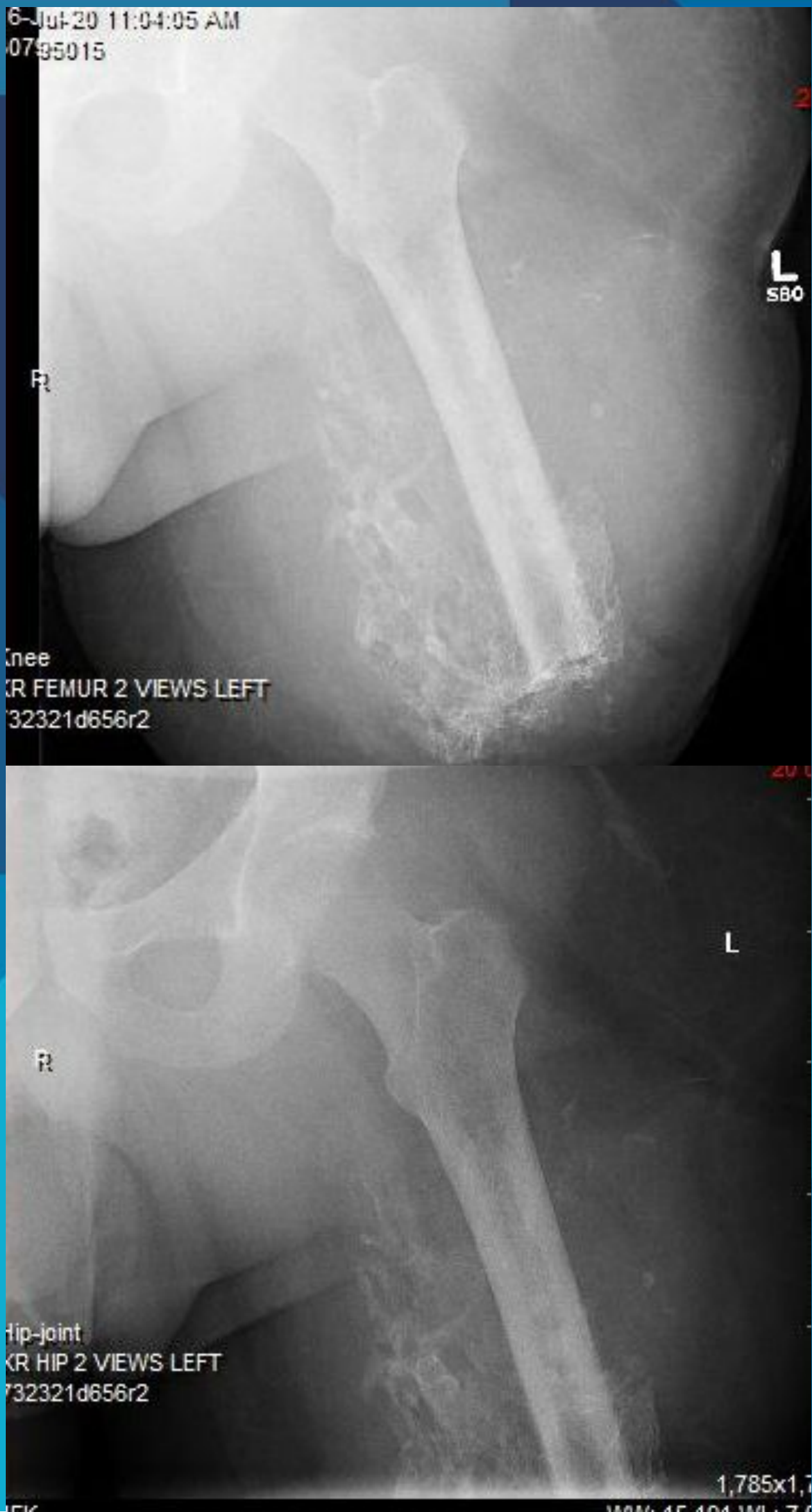
Assessments/Results

Patient was found to have severely limited range of motion (ROM) localized to the side of the AKA. Due to firmness of the limb, an x-ray was ordered that showed left hip heterotopic ossification (HO), which explained his severe limitations with passive and active ROM. He continued to have left hip flexion contractures despite physical therapy.

In the early stages of HO, there is rapid growth of the tissue, and eventually this tissue becomes localized and firm.

Figures

The X-rays depicted to the right show a “popcorn” appearance
HO affects the proximal joints more commonly.
It is extra-articular and extra-capsular.



Discussion

HO is a serious complication that may require surgical revision. It occurs in approximately 20% of traumatic civilian amputees. It can also affect up to 60% of traumatic military amputees. Those patients who are at increased risk of developing HO should be started on preventative therapy with NSAIDs, except for those at risk for bleeding. Since this gentleman was young and had no significant renal or cardiac history, he may have been a suitable candidate for preventative treatment.

CONCLUSION

It is very important to educate both surgeons and physiatrists about the use of preventative medication such as NSAIDs and radiation to prevent HO in amputees. Those patients who suffer traumatic amputations should be assessed appropriately to avoid long-term complications of HO, which include decreased functional mobility and challenges to fitting a prosthesis.

Physiatry consultation in the early stage of this patient’s recovery could have been extremely beneficial. Early intervention with passive stretching of the lower extremity may have prevented his pain and contracture. Physical therapy, use of NSAIDs, and serial triphasic bone scans are important to monitor patient’s progression.

REFERENCES

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