

## A Bloody (Pseudo) Locked Knee

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### INTRODUCTION:

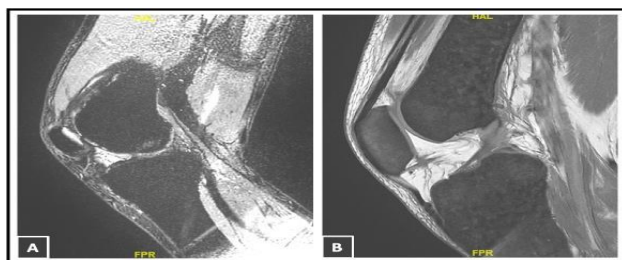
A locked knee is an Orthopedics relative emergency characterized by an inability to extend knee fully after an injury<sup>1</sup>. It must be promptly treated as a knee that is locked for an extended duration can result in fixed flexion deformity as well as premature cartilage degeneration.

### REPORT:

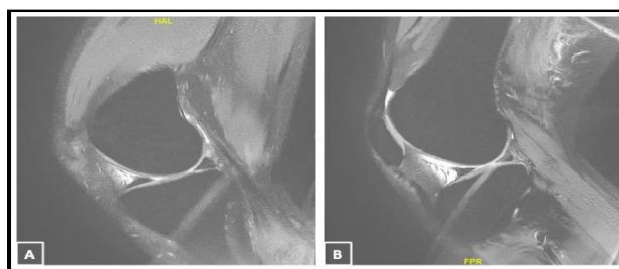
A 29-years-old gentleman with underlying transfusion-dependent Beta-thalassemia intermedia since the age of 7 presented with one-week history of unprovoked sudden onset right knee pain. There was no recent trauma prior to the onset of symptoms.

Clinically, there was a fixed flexion deformity of his right knee of about 30 degrees. There was no effusion nor tenderness. Range of motion was 30-120 degrees. There was no fracture or dislocation on knee radiographs. Blood investigations revealed a microcytic hypochromic anemia, otherwise was unremarkable.

An MRI revealed a non-displaced horizontal tear of the posterior horn of medial meniscus, sprain of the posterolateral bundle of the ACL as well as low signal deposits in the lateral trochlear cartilage and infrapatellar fat pad, suggestive of iron deposition, in keeping with his underlying transfusion-dependent Beta- thalassemia.



**Figure 1. Coronal slices of the MRI scan of the patient's knee showing areas of iron deposition. (A) depicts iron deposition within the lateral femoral trochlear region. (B) demonstrates hypo-intense bands at the infrapatellar region suggestive of iron deposition.**



**Figure 2. Coronal slices of the MRI scan of the patient's knee showing his menisci. (A) demonstrates a linear hyper-intense signal suggestive of a non-displaced horizontal tear of the posterior horn of the medial meniscus. (B) shows an intact lateral meniscus.**



**Figure 3. Coronal slices of the MRI scan of the patient's knee showing the cruciate ligaments. (A) shows an intact posterior cruciate ligament. (B) demonstrates some degree of attenuation of the posterolateral fibres of the anterior cruciate ligament.**

### CONCLUSION:

In most cases, a locked knee is commonly a sequelae of a sport injury or trauma and there is a tendency to proceed with a diagnostic arthroscopy to address the causative pathology<sup>2</sup>. Whilst expedient treatment is paramount to prevent further complications, not every case warrant surgery as highlighted in this case where there was a clear absence of an inciting event. As with all medicine, treatment should be tailored to the individual patient.

### REFERENCES:

1. Perkins G. Orthopaedics. London: Athlone Press.78.
2. Critchley IJ, Bracey DJ. The acutely locked knee is a manipulation worthwhile? Injury 1985;16(4):281.