

X-rays quiz: a man with knee injury

X光照片猜謎：一名膝部受傷的男子

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Case

A 50 years old man sustained a left knee sprain injury on the day of attendance. Physical examination revealed mild diffuse tenderness over the medial side of his left knee without any effusion or swelling. The range of movement of his left knee was full and ligament stress tests were negative. He could walk with full weight-bearing.

He had sustained a similar injury three months ago and attended another emergency department at that

time. He was told to have no fracture in the X-rays of his left knee and was treated conservatively. Figure 1 shows the X-rays of his left knee taken in our department.

Questions

1. Describe the radiological finding in Figure 1.
2. What is the diagnosis?
3. What is the management?

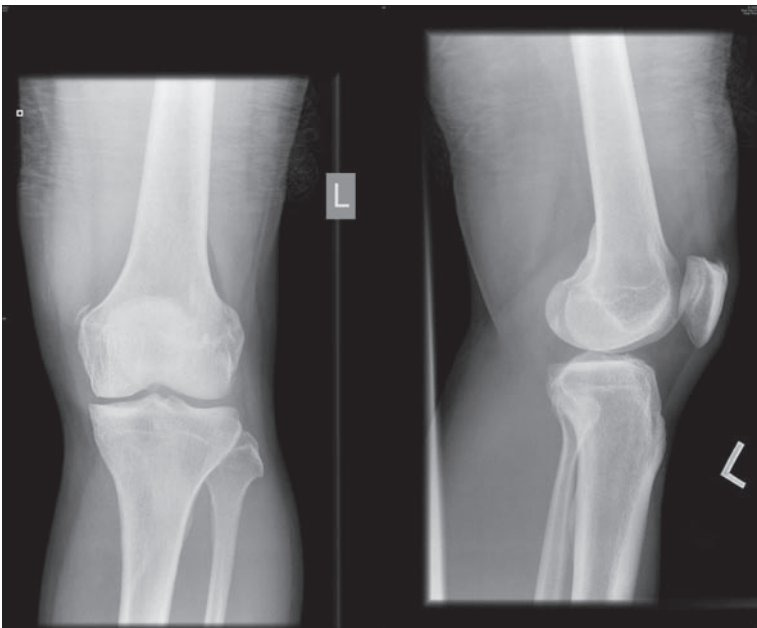


Figure 1. X-rays of the left knee.

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Answers

1. A radiopaque shadow (calcification/ossification) is seen on the medial side of the left femoral condyle (Figure 2).
2. Pellegrini-Stieda disease.
3. Reassurance and conservative treatment.

Discussion

Pellegrini-Stieda disease (PSD) has been described as calcification, ossification, or both in the medial collateral ligament (MCL) in the early 1900s by Pellegrini and Stieda. PSD is an entity classically related to trauma including direct and indirect injury to the medial side of the knee.¹ Repeated micro-traumas, including therapeutic manipulation of a stiff joint and post surgical rehabilitation, have also been reported.² Radiographically, the ossification is seen as a thin crescent or curvilinear line of a few millimetres from the femoral condyle. This feature is crucial for ruling out other lesions including fracture of the femoral condyle, periostitis, and osteoma.³

Ossification in PSD is not confined to the MCL but may also involve the adductor magnus tendon. It can

be related to the anatomic proximity (overlap) of the fibres of these structures. There are different classifications to describe the location of the ossifications but no clinical differences among these types appear to exist.⁴ Treatments for mild and moderate cases include local corticosteroid injection and range-of-motion exercise. Surgical excision of the calcifications and repair of the tear in the medial collateral ligament can be considered for refractory cases.⁵

References

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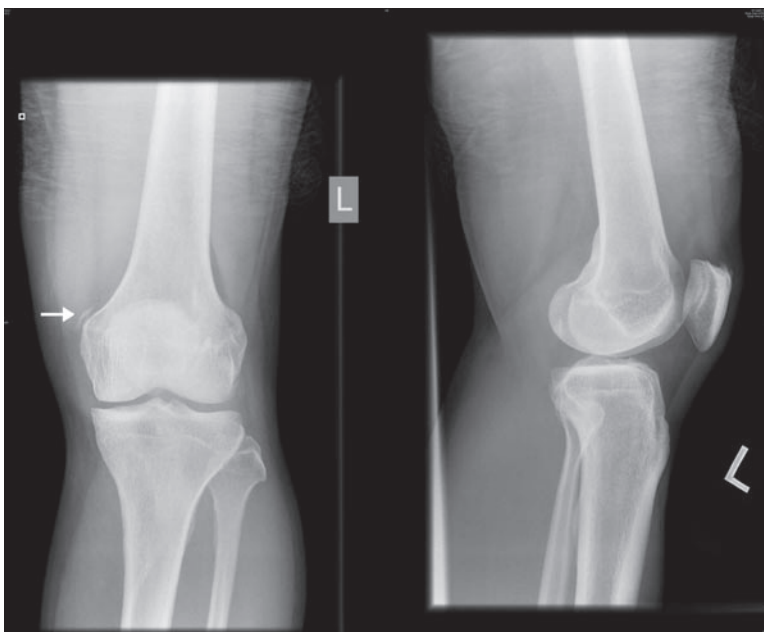


Figure 2. Pellegrini-Stieda lesion (indicated by the arrow).