



ESSENTIAL IMAGE / *Musculoskeletal imaging*

Os peroneum retraction: An indicator of peroneus longus tendon tear



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A 68-year-old man was walking downstairs when he heard a snap sound in his left foot followed by pain. Physical examination revealed swelling and tenderness over the lateral foot. Radiograph of the foot (Fig. 1A and B) showed posterior displacement of the os peroneum but no fracture was detected. An MRI of the ankle performed one week later revealed complete tear of the peroneus longus tendon at the level of the cuboid groove. The proximal torn end of the tendon with os peroneum attached to it was retracted, with a gap of approximately 1.6 cm between the torn ends (Fig. 1C and D). The patient was managed with surgical repair of the tendon. An os peroneum is present within the peroneus longus tendon in approximately 5–26% of the population [1]. It is important to be aware of its usual position lateral to the cuboid and that any displacement posteriorly may represent a tear of the peroneus longus tendon [2].

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Figure 1. A and B. Frontal (A) and oblique(B) radiographs of the foot demonstrate posterior displacement of the os peroneum (arrows) from its usual position close to the calcaneocuboid joint. Arrowhead indicates the normal position of the os peroneum. C and D. Proton density fat saturated MR images in the axial (C) and sagittal (D) planes demonstrate complete tear of the peroneus longus tendon. The retracted os peroneum (arrow) with attached proximal end of the torn tendon as well as the torn distal end of the tendon (arrowhead) are shown.

Authors contribution

Sachin Nandkishore Agrawal: faculty associated with the case. Contributed in diagnosis as well as writing up of the manuscript.

James Yang Zheng: helped with literature review and preparation of the images.

Disclosure of interest

The authors declare that they have no competing interest.

References

- [1] Smith JT, Johnson AH, Heckman JD. Nonoperative treatment of an os peroneum fracture in a high-level athlete: a case report. *Clin Orthop Relat Res* 2011;469:1498–501.
- [2] Bianchi S, Bortolotto C, Draghi F. Os peroneum imaging: normal appearance and pathological findings. *Insights Imaging* 2017;8:59–68.