

Symptomatic enlarged fabella

Filon Agathangelidis,¹ Themistoklis Vampertzis,² Erato Gkouliopoulou,¹ Stergios Papastergiou²

¹General Hospital of Veria, Veria, Greece

²Orthopaedics Department, Agios Pavlos General Hospital of Thessaloniki, Thessaloniki, Greece

Correspondence to

Filon Agathangelidis, fagath@gmail.com

Accepted 20 October 2016

DESCRIPTION

A male patient aged 20 years presented to our outpatient department reporting of a 2-year history of right knee discomfort associated with snapping episodes, especially when moving from a seated to a standing position. His medical history was unremarkable and there was no history of trauma. The oblique radiograph of the knee revealed a large ossified structure at the posterolateral corner (figure 1). Routine blood tests, erythrocyte sedimentation rate and C reactive protein were within normal limits. MRI of the knee showed the large ossified structure within the lateral head of the gastrocnemius, while the rest of the examination was normal (figure 2). The tendon of the lateral head of the gastrocnemius attached to its posterior aspect and the anterior surface articulated with the lateral femoral condyle. Based on the location and



Figure 1 Oblique radiograph of the knee showing the enlarged fabella (white arrows).



Figure 2 MRI T1 image of a calcified structure in the posterior lateral corner indicating a sizeable fabella (black arrows).

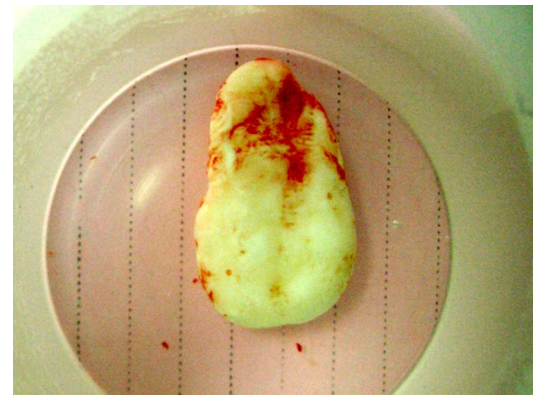


Figure 3 The excised fabella.

anatomical characteristics, the structure was identified as a fabella and its large size explained the patient's symptoms. Following informed consent, the patient agreed to surgical excision of the fabella which promptly relieved him from his symptoms. There was histopathological confirmation that the core was an osseous tissue with a periphery of ossified cartilage (figure 3).

A fabella is a sesamoid bone located in the anterior gliding surface of the lateral head of the gastrocnemius muscle and its substance can be either bony or cartilaginous.^{1 2} The bony fabella can be easily distinguished from the surrounding tissue and is easily identified in plain lateral radiographs of the knee. On the other hand, a cartilaginous fabella is characterised by a partly ossified cartilage in the centre and it is more difficult to capture in imaging studies. There is a wide range of incidence reported in the literature ranging from 8.7% to 85.8%. The reported length is 4–22 mm with a diameter of about 10 mm, while in our case, it measured 30×16×8 mm.^{1–3} To the best of our knowledge, this is the largest fabella described in the literature and we believe that its size was the main reason of the mechanical symptoms.

Learning points

- ▶ A fabella is a sesamoid bone in the posterolateral aspect of the knee and usually asymptomatic.
- ▶ A large fabella can cause snapping knee.
- ▶ Non-surgical treatment with steroid infiltration and physiotherapy is the treatment of choice and surgical excision is indicated for larger and symptomatic fabellae.



To cite: Agathangelidis F, Vampertzis T, Gkouliopoulou E, *et al.* *BMJ Case Rep* Published online: [please include Day Month Year] doi:10.1136/bcr-2016-218085

Contributors FA wrote the manuscript and reviewed the literature along with TV. EG reviewed the manuscript. SP is the senior author and corrected the manuscript.

Competing interests None declared.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

REFERENCES

- 1 Chew CP, Lee KH, Koh JS, *et al*. Incidence and radiological characteristics of fabellae in an Asian population. *Singapore Med J* 2014;55:198–201.
- 2 Kawashima T, Takeishi H, Yoshitomi S, Ito M, *et al*. Anatomical study of the fabella, fabellar complex and its clinical implications. *Surg Radiol Anat* 2007;29:611–16.
- 3 Phukubye P, Oyedele O. The incidence and structure of the fabella in a South African cadaver sample. *Clin Anat* 2011;24:84–90.

Copyright 2016 BMJ Publishing Group. All rights reserved. For permission to reuse any of this content visit <http://group.bmj.com/group/rights-licensing/permissions>.
BMJ Case Report Fellows may re-use this article for personal use and teaching without any further permission.

Become a Fellow of BMJ Case Reports today and you can:

- ▶ Submit as many cases as you like
- ▶ Enjoy fast sympathetic peer review and rapid publication of accepted articles
- ▶ Access all the published articles
- ▶ Re-use any of the published material for personal use and teaching without further permission

For information on Institutional Fellowships contact consortiasales@bmjgroup.com

Visit casereports.bmj.com for more articles like this and to become a Fellow