

## CASE REPORT

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**An extra-articular cause of locking knee**

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**Abstract** We report an uncommon case of locking of the knee in a 23-year-old girl. It was due to an osteochondroma at the medial aspect of the proximal tibia.

**Resumé** Nous rapportons le cas du blocage du genou chez une jeune femme de 23 ans. Il était causé par une exostose de la face interne de la partie supérieure du tibia.

flexion of the knee. During extension of the knee the sliding of the tendon was therefore hampered, leading to knee locking (Fig. 2). The bony mass was resected; its length was 3 cm. Histology confirmed the diagnosis of osteochondroma. At a follow-up after 2 years the patient is asymptomatic and no relapse is evident.

**Introduction**

Extra-articular causes of knee locking are extremely rare. We have been able to find only one paper published in the international literature [2]. We describe the case of a young woman with frequent episodes of locking of her right knee after full flexion. The locking was due to trapping of the pes anserinus tendons by an osteochondroma of the inner part of the upper tibia. Excision of the exostosis completely relieved the complaint.

**Case report**

A 23-year-old woman, reported difficulty in completely extending the right knee and clicking noise of the joint itself after full flexion. When the knee was blocked, she found that she had to fully flex the knee joint to obtain complete extension sometimes several times, until she felt a sense of “unlocking”. The physical examination was almost normal, showing only slight pain and tenderness in a not well-localized area on the medial aspect of the proximal metaphysis of the tibia.

The articular locking was diagnosed by the orthopedic surgeon as being due to a meniscal tear, and he requested arthrography of the knee. The arthrography did not show any lesions of the menisci, but disclosed a pedunculated bony prominence, pointing upward distally, with the typical appearance of an exostosis (Fig. 1).

On surgery, the exostosis appeared to be hook-shaped and was able to trap the gracilis tendon and to displace it proximally during



**Fig. 1** Arthrography of the right knee. A bony prominence is evident at the medial aspect of the proximal metaphysis of the tibia



**Fig. 2** Surgical exposure of the Pes Anserinus region. The Sartorius tendon is retracted distally with the clamp. The Gracilis tendon – pulled by the hook – is snagged under the osteochondroma

## Discussion

Formation of an osteochondroma on the medial face of the proximal third of the tibia is not infrequent, especially in young people [1].

In the international literature, we have found only one report of knee locking due to trapping of the pes anserinus tendons by a tibial osteochondroma [2]. A second case of trapped pes anserinus tendons had completely different characteristics, being secondary to a trauma and provoked by an epiphyseal Salter-Harris type II fracture [3].

Taking our rare case as a starting point, we think it is worthwhile to do a traditional X-ray examination of orthopedic patients even when the clinical picture shows signs and symptoms typical of those intra-articular knee disorders for which the X-ray examination is sometimes considered unnecessary.

## References

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