

Intraarticular osteochondroma of the knee

Sir,

We read with great interest the case report by Morey *et al.* "Intraarticular osteochondroma of the knee,"¹ where the authors reported that there are only three other similar cases in the literature. This is indeed a rare presentation, and I must congratulate the authors for a nice presentation of this "teaching case."

However, we would like to point out that "intraarticular osteochondroma" is a well known entity and has been described in the literature as Trevor's disease (tarso-epiphysal aclasis).² First described in 1926 by Mouchet and Belot (tarsomegalie),³ this condition is also known as Fairbank's disease or dysplasia epiphysealis hemimelica.⁴ Trevor's disease is considered a skeletal developmental disorder characterized by asymmetric overgrowth of cartilage in the epiphyses, analogous to an "osteochondroma" of the epiphysis. The prevalence has been reported as 1 in 1 million and the etiology is unknown.⁵ Moreover, it needs to be differentiated from another similar entity called extraskeletal paraarticular osteochondromas, which is an osteocartilaginous lesion arising in the soft tissues, adjacent to the joint but without any bone continuity.⁶

Thus, an intrarticular osteochondroma is not as rare as reported by the authors, possibly because of several nomenclatures and ambiguity in literature search. In fact, apart from just the three other cases of the knee noted by the authors,⁷⁻⁹ literature review actually shows several other similar intraarticular osteochondromas (excluding extraskeletal paraarticular osteochondromas) arising in the knee joint⁷⁻¹⁴ and several of these had been removed arthroscopically in contrast to the authors' conclusion.^{7,8,10,11} We have also personally resected a similar lesion in a 5-year-old male who had a full range of motion without any growth disturbance at 7 years followup [Figures 1-5]. A review of literature in 2007 revealed 57 patients with Trevor's disease with 44 of the lesions in the knee (29 of them in the distal femur and 15 in the proximal tibia).¹² It has also been classified as localized, classical and generalized form.¹³ Multiple epiphyses may be involved in upto two-thirds of the cases, and thus a skeletal survey is recommended once the initial diagnosis is made. Most cases in the literature were treated by surgical removal of the mass and correction



Figure 1: Clinical photograph of a 5-year-old boy showing diffuse swelling in the left knee (white arrow). The patient presented with increasing swelling, locking, stiffness (range of motion 30°–100°) and intermittent pain in the left knee for the past 6 months

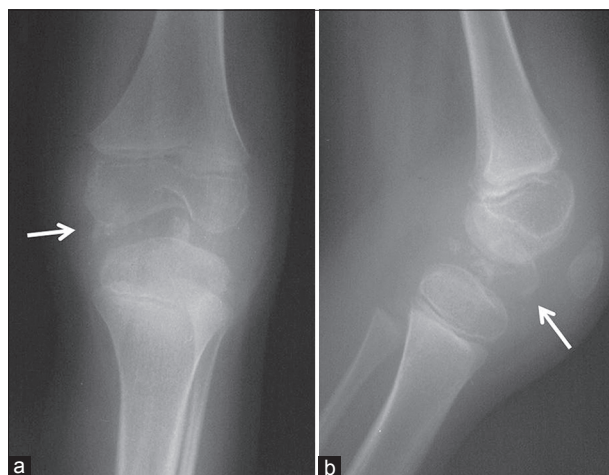


Figure 2: (a) Antero posterior and (b) lateral radiographs of the knee showing an intraarticular mineralized mass. The rest of the bone seemed uninvolved (white arrow)

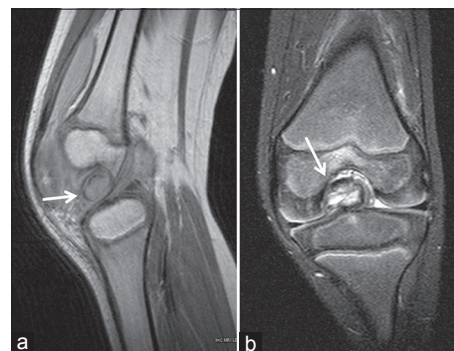


Figure 3: A sagittal magnetic resonance imaging with proton density sequence (a) TR 3000, TE 13 showing an intraarticular mass (slight hyperintense to the muscle) in the intercondylar notch with a large effusion (white arrow). A coronal short tau inversion recovery sequence (b) TR 5680, TE 51 showing lobulation and heterogeneity in the mass

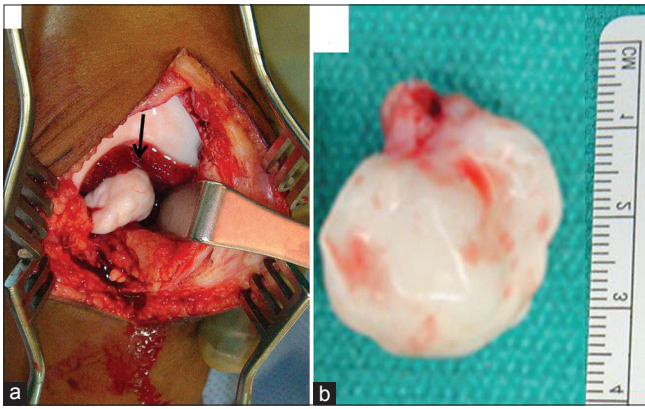


Figure 4: Because of the symptoms, imaging studies and size of the mass, the patient was indicated for open excisional biopsy (a) Intraoperative photograph showing a large osteochondromatous mass in the intercondylar notch with bony continuity with the rest of the femur (black arrow). (b) The mass measured about 3 × 3 × 2 cm and was reported as an osteochondroma on histology, confirming the diagnosis of Trevor's disease

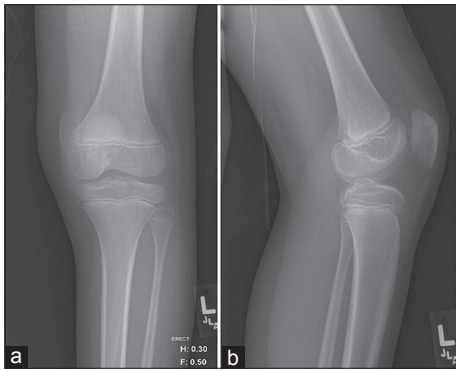


Figure 5: (a) Antero-posterior and (b) lateral radiographs of the same knee after 7 years followup showing no residual mass, deformity or premature closure of growth plates. The patient was totally asymptomatic with full painless range of motion

of any joint deformity. Recurrence is unlikely but has been reported.¹⁴ However, we do agree with the authors that Trevor's disease of the knee should be considered in the differential of an intrarticular knee mass in young patients.

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Quick Response Code:	Website: www.ijonline.com
	DOI: 10.4103/0019-5413.152547