The Editor

Sir,

Lipomas represent the most common soft tissue neoplasm and account for almost 50% of all soft-tissue tumours (1). They may arise in any location, but is located most frequently on the trunk, chest, thigh, arm and shoulder (2). These tumours are more frequently found in subcutaneous sites and therefore can be removed by incisions in the overlying skin. However, they are sometimes found in submuscular sites and can cause doubt in the diagnosis and greater surgical effort. Occurrence of lipoma in the foot is extremely rare. Lipoma of the foot such as the lateral plantar aspect of the heel, dorsal aspect, second toe, fourth digit, calcaneus, fifth metatarsal and first metatarsophalangeal joint has been reported. Herein is reported a unique case with deep-seated lipoma of the foot. A 10-year old male child was admitted to the Department of Orthopaedics and Traumatology with the complaint of discomfort in the plantar aspect of his right foot. Physical examination revealed approximately a 5 cm nontender swelling in the plantar aspect of the foot. The swelling was painless and had been apparent for one year. It caused difficulty in walking. Neurological examination of the affected foot was normal in every respect.

Magnetic resonance imaging (MRI) revealed a possibly encapsulated solid mass with lobulation. The mass was located in the centre of the plantar region and had an extension to the dorsal aspect of the foot passing through the interosseous space between the second and third metatarsal bones (Fig. 1). Wide surgical excision of the tumour deep to the plantar fascia and muscular tissues was performed without any complication (Fig. 2). Diameters of the excised mass was 6.5 x 5.5 x 4.2 cm. Histopathology revealed predominantly mature adipocytes admixed with collagen streaks (Fig. 3) consistent with a lipoma. After the operation, the patient’s difficulty in walking disappeared.

Fig. 1: Coronal view of high resolution MRI T1 weighted sequences, low signal intensity on T2 weighted fat suppressed and STIR sequences showing deep-seated lipoma in the plantar region of the foot.

Fig. 2: Different stages of the surgery A, B, C: removal of the lipoma, D: photograph of the excised lipoma.

Fig. 3: Typical histopathological features of the lipoma on haematoxylin and eosin. Original magnification ×200.
Deep soft-tissue lipomas most frequently occur in patients 30–60 years old. It is unusual in a 10-year old. The lipoma is composed predominantly of mature adipocytes, possibly admixed with collagen streaks, and is often well demarcated from the surrounding connective tissues. A thin fibrous capsule may be seen and a distinct lobular pattern may be present. In the present case, the lipoma was located in the centre of the plantar region and had an extension to the dorsal aspect of the foot passing through the interosseous space between the second and third metatarsal bones. Such deep localization of the lipoma and its extension has not been reported in the literature to our knowledge.