

A case of accessory calcaneus

A 5-year-old boy had accessory calcaneus (os trochleare) with pain, shoe pressure, and a varus position of the foot not reported previously. He became free from his symptoms after the abnormal bone had been excised.

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Case report

A 5-year-old boy was admitted because of a freely movable, occasionally painful, but not tender, enlargement below the right lateral malleolus, which he had had for 2 years. He had also discomfort from pressure of his shoe, and the foot was in a prominent varus position. The osseous prominence was not tender. Radiographs of the ankle showed a 2 x 2 cm accessory bone below the lateral malleolus (Figure 1). The left foot was normal.

Because of the discomfort and the varus deformity, the bone was excised. The peroneal tendons were flattened corresponding to their passage behind the accessory bone.

Plaster was applied for 3 weeks, and the postoperative course was uneventful. The foot was normal at the follow-up examination 18 months later.

Discussion

Hyrtil (1860) described processus trochlearis, an osseous prominence considered to be a pulley for the peroneal tendons. Synonymous terms applied in the medical literature are tuber calcanei lateralis and peroneal crista. Processus trochlearis is most often a bone edge a few millimeters on the lateral side of the calcaneus. In rare cases the formation may consist of epiphysoid bone with endochondral ossification and may be separate from the os calcis. Köhler & Zimmer (1982) called this accessory bone os trochleare. The calcaneus accessorius may cause clinical symptoms of pressure upon use of footwear (de Cuveland 1956). The osseous prominence may grow to a diameter of several centimeters (Friedl 1924), in which case a pseudarthrosis with the lateral malleolus may be seen (de Cuveland 1956).

In our case, impaction of the osseous prominence between the calcaneus and the fibula

caused varus position of the foot and a gait marked by walking over the lateral border of the foot. Apparently, no previous mention of this complication has been made in the literature.

References

- de Cuveland, E. (1956) Processus trochlearis or lateralis tuber calcanei. *Fortsch. Roentgenstr., Nuklearmed.* Ergänzungsband 84, 648-650.
- Friedl, E. (1924) Das Os intermetatarsum und die Epiphysesbildung am Processus trochlearis calcanei. *Dtsche Z. Chir.* 188, 150-156.
- Hyrtil, J. (1860) Über die Trochlearisfortsätze der menschlichen Knochen mit 4 Tafeln. *Denkschr. Akad. Wien* 18, 141-149, 156.
- Köhler, A. & Zimmer, E. A. (1982) Grenzen des normalen und Anfänge des pathologischen im Röntgenbild des Skelettes. Georg Thieme Verlag, Stuttgart, 794-795, 804.
- Trolle, D. (1948) *Accessory bones of the human foot.* M.D. thesis, Munksgaard, Copenhagen.



Figure 1. An accessory bone, calcaneus accessorius (os trochleare) is seen on the lateral border of the calcaneus.