Case Report:
Multiple Haemangiomata

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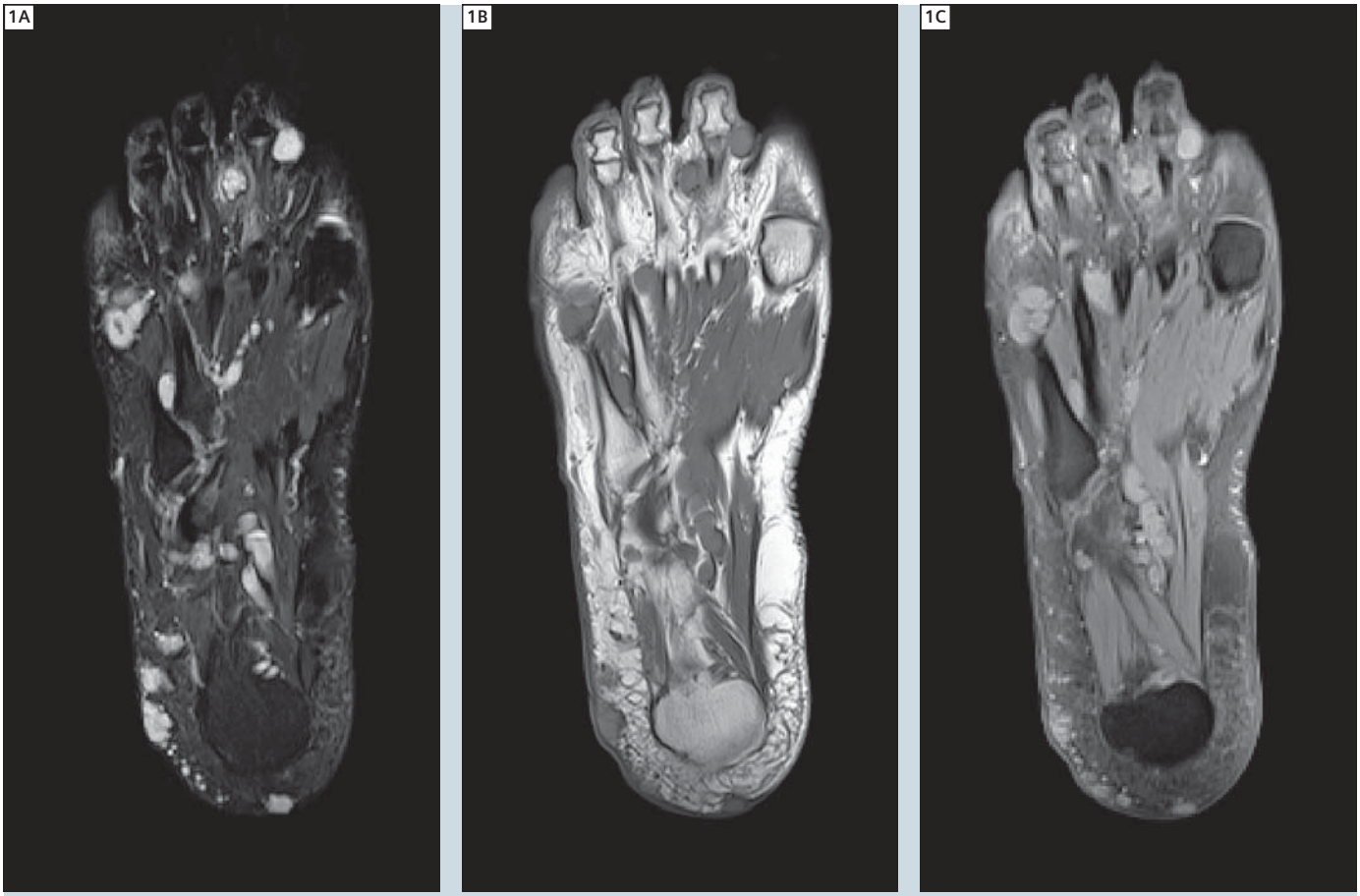
Patient history

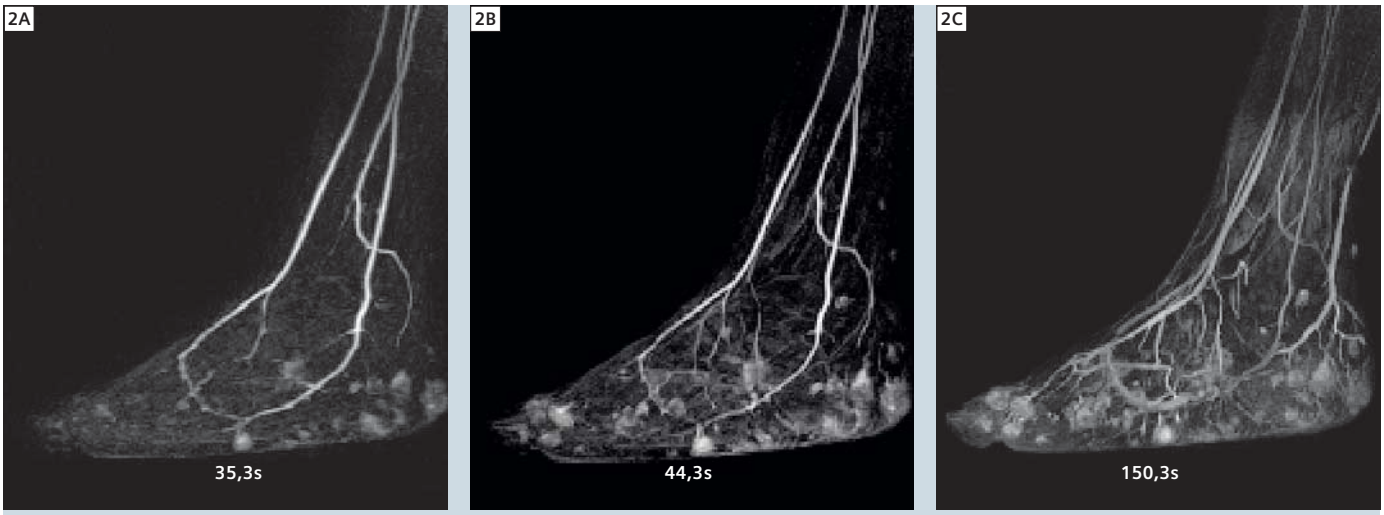
A young female presented for follow up scans of her right foot and ankle. This patient has multiple haemangiomata in her right lower limb; these have been monitored clinically for several years. The lesion under her R second toe had become progressively more swollen and painful.
The MRI scan was requested to investigate the rate of change of the lesions and assess their relationship to other anatomical structures. The scan will serve as a baseline for later comparisons after radiation or possibly anti-angiogenic drug treatment. There is no guarantee that even with amputation, further lesions will not develop elsewhere in the limb.

Sequence details

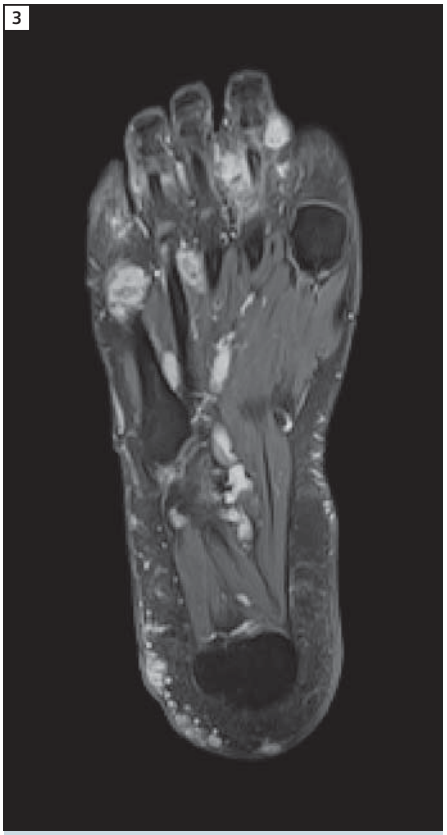
The examination was performed with a Siemens 3T MAGNETOM Trio, A Tim System. Axial STIR, T1, and T1 fat sat were performed on the right foot.
The STIR imaging was acquired with a TI of 210, TR 7700 and TE 38. The total time for the acquisition was 2:50 min at a resolution of 384 x 307 and a FOV of 280 x 280.



1 Axial STIR **(A)**, T1-weighted **(B)** and T1-weighted with fat saturation **(C)** of the right foot.



2 MIP of post contrast *syngo* TWIST MRA of the right foot; time resolution was 3 seconds. Images acquired **(A)** 35 s, **(B)** 44 s and **(C)** 150 s after start of contrast media administration.



3 Axial contrast-enhanced T1-weighted MRI with fat saturation.

The T1 imaging was acquired with a TR of 695 and TE of 11. The total time was 3:09 min with a resolution of 448 x 358 and FOV of 280 x 280. The fat saturation applied was relatively weak.
Post contrast *syngo* TWIST MR Angiography (MRA) of the right foot was performed. Images were taken every 3 seconds to view the temporal enhancement of the lesions. 120 images per acquisition were taken in the sagittal plane with a FOV of 255 x 320 and at a resolution of 320 x 130.
Post contrast T1 was performed with the same parameters as the pre-contrast fat sat T1.

Image findings

Structurally, most of the haemangiomata demonstrated no discernible change since the previous MRI. The largest lesions were in the subcutaneous tissue lateral to the calcaneum, just above the distal 5th metatarsal, and immediately below the distal foot metatarsal. There was no evidence of any developing soft tissue mass associated with the haemangiomata to suggest an aggressive component, and there was no focal bony lesion.

On the post-contrast dynamic acquisition MRA, the more prominent subcutaneous lesions along the lateral aspect of the distal/hind foot demonstrated relatively earlier enhancement than the other lesions. This indicates higher blood flow and suggests that these are the more active lesions.
While most of the lesions demonstrated no discernible change since the previous MRI, the lesion along the medial aspect of the second toe did demonstrate moderate enlargement.

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