Guidelines for the Imaging of Vascular Anomalies

MRI Sequences

The following MRI sequences should be performed for all vascular anomalies:

- Axial T1 Fat-Sat
- Axial T2 Fat-Sat
- Coronal T1
- Coronal Inversion Recovery

Contrast-enhanced: Axial T1 Fat-Sat, Coronal T1 Fat-Sat

For the extremities, the sagittal plane may be more suitable than the coronal, depending on the long-axis of the lesion. For lesions in the head and neck, at least one pre and post contrast sagittal sequence should be added.

MRA/MRV sequences may also be useful in suspected high-flow lesions, but should not be performed as an alternative to the basic sequences.

Ultrasound

All examinations should include color and spectral Doppler traces in addition to 2D imaging. The Doppler traces should be obtained from intrallesional channels, as well as any identifiable feeding or draining vessels.

CT

This investigation is not indicated in the majority of cases. Cases with suspected bone destruction may be better appreciated on CT. Multi-phase scanning of the liver and CTA may also be appropriate in a select population.

Angiography

Diagnostic angiography should only be undertaken as part of a therapeutic procedure.