A 66-year-old patient presented with marked headache. Neurological examination was unremarkable. Fat saturated T1 weighted magnetic resonance showed bilateral dissection of the extracranial internal carotid artery. Dissections are among the most frequent causes of young onset stroke. They may, however, be difficult to diagnose only on the basis of history and clinical signs, and even standard brain imaging may not suffice. Fat saturated T1 weighted magnetic resonance is the method of choice to detect mural haematoma and residual lumen. Bilateral internal carotid artery dissection may resemble the face of a puppy in axial orientated sections, and awareness of this “puppy sign” may ease the quick visual diagnosis (fig 1).

References

Figure 1 Axial fat saturated T1 weighted magnetic resonance of bilateral internal carotid artery (ICA) dissection (A) resembling the face of a dog (B). (a) Ears = masseter muscles; (b) eyes = ICA, sclera = subintimal haematoma, pupil = residual lumen; (c) snout tip = upper cervical spinal cord; (d) snout = cervical spinal canal; (e) flew = longissimus capitis muscle; and (f) throat = subcutaneous fat tissue.
"Puppy sign" indicating bilateral dissection of internal carotid artery

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