Vertebral artery dissection: Not as uncommon as we think?

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INTRODUCTION

Vertebral artery dissection (VAD) is thought to be a rare cause of ischaemic stroke. It can be difficult to diagnose. In observational studies the classical features of minor cervical trauma, neck pain, and headache were only found in 37%, 66%, and 65% of patients respectively. We present 2 cases of spontaneous VAD with atypical presenting features.

CASE 1 - Mr A
A 33 year old man presented to ED with a short history of frontal headache, unsteadiness, clumsiness, and falls. Neurological examination was normal with no cerebellar signs. An initial plain CT brain scan was reported as normal. The patient was discharged with a diagnosis of atypical migraine. However, a subsequent neuroradiology review revealed a small right superior cerebellar infarct (Figure 1). The patient was recalled to ED the next morning and CT angiogram confirmed a right VAD (Figure 2). He was seen by a Stroke Neurologist in ED and was discharged with a 3 month course of aspirin 300mg.

CASE 2 - Mrs B
A 47 year old lady presented with loss of consciousness lasting 30 seconds during a pre-match hockey warm up. Afterwards she suffered from confusion and amnesia which lasted 12 hours. Initial CT brain scan and lumbar puncture was normal, but subsequent MRI revealed multiple embolic infarcts in the occipital lobes (Figure 3). CT angiogram confirmed a left VAD (Figure 4). She was treated with a 6-month course of warfarin and then switched to aspirin 75mg for 1 year. She made a complete recovery.

DISCUSSION

VAD is an important cause of ischaemic stroke in younger patients. The diagnosis is made on CT or MR angiography. Antiplatelets or anticoagulation for 3 months have equal efficacy – though some stroke physicians will chose anticoagulation if the area of associated infarct is small. Epidemiological studies estimate the incidence of VAD at 0.97 per 100,000 population. The true incidence may be higher due to the paucity of reliably associated clinical signs. A high index of suspicion is essential, particularly in young patients presenting with atypical neurological symptoms.

REFERENCES