Clinical Manifestations of Vertebral Artery Dissection

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Abstract
The most frequent clinical manifestation of vertebral artery dissection is posterior headache or neck pain accompanied or followed by posterior circulation transient ischemic attack or stroke. Rarer clinical features include isolated headache or neck pain, cervical spinal cord ischemia and cervical root impairment. Asymptomatic vertebral artery dissections have been reported.

In the case of primary intracranial vertebral artery dissection or intracranial extension of an extracranial dissection, subarachnoid hemorrhage and rarely rostral cervical spinal cord ischemia or posterior fossa mass effect may occur.

Vertebral artery dissection (VAD) is a potentially disabling and yet probably under-recognised condition often occurring in young and middle-aged adults. The mean age of symptom onset is about 40 years. But VAD can occur also in children and in patients older than 60 years [1, 2]. The classical clinical presentation is occipital headache, posterior neck pain, or both, usually more marked on the side of the dissection associated with posterior circulation ischemia (table 1). There is often a time delay of some hours or days between the occurrence of pain and ischemia.

However, the spectrum of clinical presentation is broad. Some patients present with headache or neck pain alone and asymptomatic patients with proven VAD have been described. If the dissection extends intracranially subarachnoid hemorrhage (SAH) or lower brain stem compression may occur. All clinical symptoms and signs are not specific for VAD. Therefore the diagnosis