

Comment

When every minute counts

Up to half of all those admitted with suspected stroke have quite different diagnoses (1). In order to determine the diagnosis, both the clinical history and neurological examination are necessary, in addition to radiological examinations. The clinical examination quite often excludes other diagnoses rapidly, but a CT/MRI is necessary to distinguish infarction from haemorrhage. In some cases, blood tests are also necessary before a decision can be reached on treatment. The greatest challenge is that this must take place very rapidly if effective treatment is to be given. At present, thrombolysis is the only approved reperfusion therapy in cases of acute cerebral infarction. The time window is 4.5 hours, and the efficacy diminishes dramatically in the course of this window. Kai Ivar Müller et al. provide a thorough and orderly review of the clinical history of a patient with apparently ordinary stroke symptoms, but who proved to have a rare condition that requires rapid diagnosis and treatment – spinal epidural haematoma. The article highlights the dilemma of making a precise diagnosis while starting appropriate treatment as quickly as possible.

A spinal epidural haematoma is an accumulation of blood in the epidural space which may cause mechanical compression of the spinal medulla with ensuing myelopathy. Early diagnosis and swift surgical intervention with decompression of the haematoma improve the chances of a good result (2–4). The condition occurs rarely, and as a rule spontaneously, but may also follow trauma, physical activity, surgical intervention, spinal puncture, spinal chiropractic manipulation, coagulatory disorders or vascular malformations (2, 5). The onset symptoms are typically acute and pron-

ounced neck pain (*coup de poignard*) with or without radiation to the limbs. The pain is followed by neurological impairment with paraparesis or tetraparesis, more rarely hemiparesis (6), Brown-Séquard syndrome (7) or anterior spinal artery syndrome. Lhermitte's sign may be a useful clue (6).

Müller et al. provide a detailed account of the potential pitfalls in the assessment of patients with acute neurological symptoms that resemble stroke. The authors present an open and systematic review of how they arrived at the diagnosis and then carried out swift surgical treatment of this patient with a spinal epidural haematoma. The neck pain, alternating hemiparesis and tetraparesis and the lack of cranial nerve impairment were important clues for finding the lesion cervico-thoracically, but diagnostic imaging was necessary for reaching a definite diagnosis (8). Clinicians who perform intravenous thrombolysis in cases of acute stroke should be aware of this condition as a contraindication to such treatment.

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