

Chronic Subdural Haematoma Presenting with Transient Ischaemic Attacks— A Case Report

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Abstract

We report a middle-aged man who presented with repeated episodes of transient ischaemic attacks (TIA) in the setting of a chronic subdural haematoma. This case report discusses the various pathophysiologic mechanisms whereby such TIA may occur in chronic subdural haematoma. We also highlight the importance of cranial imaging in cases of TIA.

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Introduction

Transient ischaemic attacks (TIA) are commonly seen in neurologic practice. They are most commonly associated with cerebrovascular insufficiency, either from a thrombotic or embolic occlusion of a cerebral artery.¹ Other neurological disorders can also present with transient neurologic deficits and may add to diagnostic confusion. We report a middle-aged man who presented with multiple episodes of TIA, in the setting of a chronic subdural haematoma.

Case Report

A 50-year-old male, previously healthy, experienced three episodes of slurred speech and mild right arm weakness, numbness and heaviness between 27 January and 30 January 1998. Each episode lasted for less than five minutes. He denied any history of trauma but did admit to having increasing, dull headache in the preceding week. On examination he was conscious, alert and oriented. His vital signs were stable. General physical examination revealed no evidence of trauma. Neurological examination revealed a mild anisocoria, the right pupil 1 mm larger than the left but equally reactive to light. During the examination, he experienced another episode lasting two minutes during which he developed dysarthria and a right pronator drift. Laboratory investigation was significant only for an elevated blood sugar (24 mmol/L). Unenhanced computed tomography (CT)

scan of the head revealed a large left frontoparietal chronic subdural haematoma with slight midline shift (Fig. 1). The haematoma was surgically evacuated and since then, the patient has not experienced any further episodes.

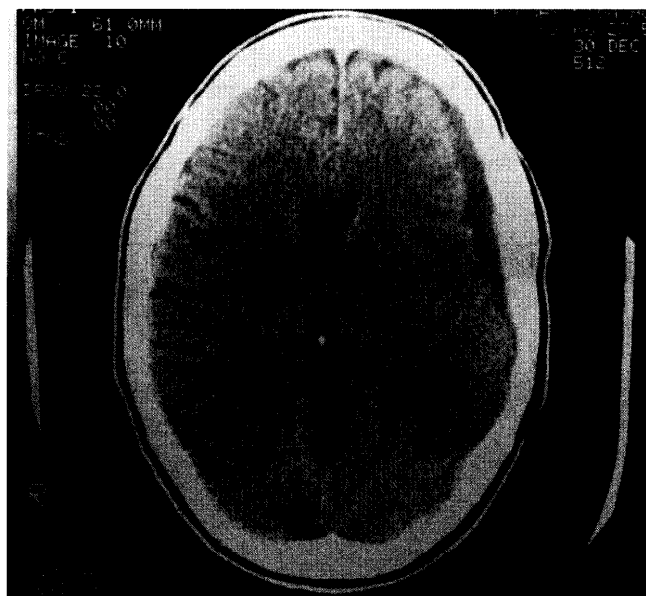


Fig. 1. Unenhanced computerised tomography of the head revealed a large left subdural haematoma, with slight midline shift.

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Discussion

Transient ischaemic attacks are commonly seen in association with cerebral ischaemia.¹ Association of TIA with migraine and seizures is well-recognised.² TIA have also been reported in cerebral aneurysms,^{3,4} meningiomas, metastatic brain tumours and brain abscesses.⁵

Chronic subdural haematoma (CSDH) usually presents with markedly fluctuating non-specific symptoms such as headaches, confusion and lethargy." The English language medical literature contains 33 cases of chronic subdural haematoma simulating TIA.^{3-5,7-13} In half of these cases there were no history of trauma or headaches. Nine percent of cases of chronic subdural haematoma presenting to the University Health Centre of Pittsburgh between 1976 and 1980 manifested TIA.⁹

Underlying pathophysiologic basis whereby chronic subdural haematoma could have produced TIA is not known. Several mechanisms have been proposed, though none seems to be certain. Spreading cortical depression⁴ and local ischaemia resulting from increasing oedema³ have also been invoked. Mechanical pressure of the haematoma on the neighbouring cortical blood vessels could potentially cause ischaemia,⁵ which would be intermittent because of pressure fluctuations in different head positions. Repeated haemorrhages within the subdural space have also been suggested as a cause for these TIA.⁹ Paroxysmal and intermittent weakness, numbness and/or speech difficulty without associated or not preceded by clonic seizures favoured more TIA than epileptic seizures.^{5,7,13}

Our case signifies the importance of cranial neuro-

imaging in patients with TIA which could be due to chronic subdural haematoma.

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