

Dexamethasone treatment of a patient with large bilateral chronic subdural haematomata

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Chronic subdural haematoma is a common cause of neurological deficits in the elderly. [1] The underlying mechanism is assumed to be bleeding from torn bridging veins. The haematoma induces an inflammatory response leading on the one hand to blood clotting and formation of neomembranes and on the other hand to degradation of the clot by enzymatic fibrinolysis [2]. The sickle-shaped lesion between the dura and the arachnoidea is preferentially treated by surgical evacuation. Post-operative complications include infections, intracranial bleeding and recollection of subdural fluids [3, 4].

We report the case of a 76-year-old patient with insulin-dependent type 2 diabetes

mellitus who presented with confusion and ataxia as a result of bilateral subdural haematomata (fig. 1). Following an episode of acute bronchospasm during induction of anaesthesia, the planned surgical treatment had to be cancelled. The patient was therefore treated with 4 mg dexamethasone bid. This led to complete resolution of the neurological symptoms within a few days. The treatment with adrenocortical steroids, however, caused extremely fluctuating serum glucose levels, making insulin therapy difficult and resulting in repeated episodes of severe hypoglycaemia. Radiological evaluation by computerised tomography after six weeks of therapy showed complete resolution of the bilat-

eral haematomata enabling the steroids to be tapered out (fig. 2). Subsequently the neurological outcome remained stable and serum glucose levels returned to normal with the previous insulin regimen.

In large space-occupying lesions with mass effect as in our patient, surgical evacuation is the established treatment option. In patients with smaller lesions without mass effect, a carefully monitored conservative approach is a possible alternative. Nonsurgical treatment with adrenocortical steroids to modulate the inflammatory process has been proposed and performed with good neurological results [5, 6]. Recently published data suggest that at least some patients with chronic subdural haematoma recover spontaneously without treatment [7].

Our report suggests that even in patients with a large haematoma, conservative treatment with steroids can be tried if surgery is contraindicated. Whether the excellent neurological outcome in our patient was due to steroid treatment or to spontaneous remission remains open. Only a randomised controlled trial can unambiguously answer this question. Such a study is needed to define the best non-surgical approach for patients with small lesions, and for those in whom surgery bears a high risk of complications.

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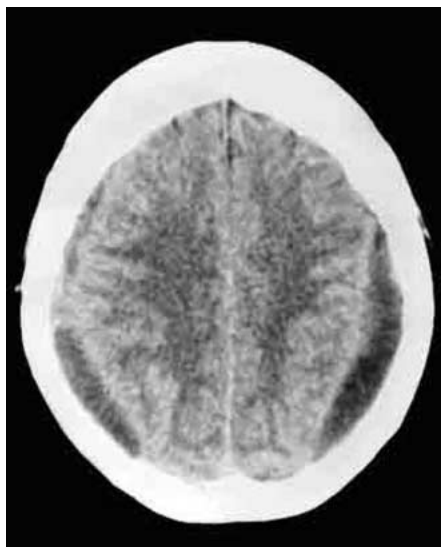


Figure 1

Computerised tomography scan of the brain on the day of admission showing bilateral chronic subdural haematomata.

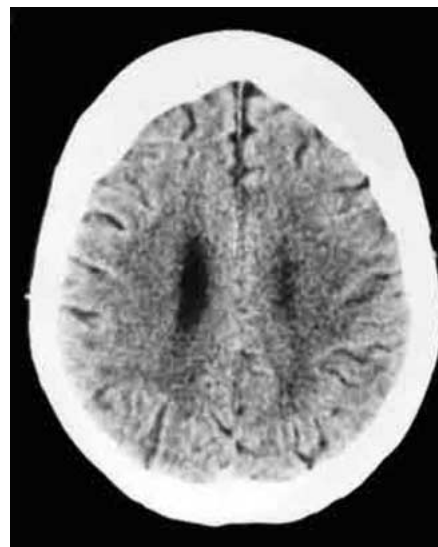


Figure 2

Computerised tomography scan of the brain six weeks later showing complete resolution without surgical therapy.

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