

Chronic Subdural Haematoma Presenting as Meningitis: A Case Report**B. B. Shehu and N. J. Ismail***Neurosurgical Unit, Department of Surgery, Ahmadu Bello University Teaching Hospital, Zaria, Nigeria***ABSTRACT**

A 28-year-old man presented to the medical ward with an acute onset of headache, fever, convulsion and deteriorating level of consciousness. Cerebrospinal meningitis was suspected for which adequate treatment was given without improvement. Neurosurgical evaluation elicited a history of trauma 4 months earlier and Computed Tomography Scan of the brain showed a subdural haematoma. The patient made rapid recovery following burr hole and drainage of the haematoma. Chronic subdural haematoma may mimic several neurological diseases and should be suspected in patients with whose neurological symptoms fail to improve on medical treatment (*Nig J Surg Res 2000;2: 30-32*)

KEY WORDS: Chronic Subdural Haematoma, Medical Presentation, Suspicion

Introduction

Chronic subdural haematoma (CSH) can be spontaneous or occur several weeks to months after a relatively minor trauma, particularly in the elderly. Its presentation is varied and it can mimic several neurological diseases. This report illustrates one mode of presentation of CSH and is intended to raise awareness and avoid morbidity and mortality.

Case report

A 28-year-old man presented to the medical ward with 2-week history of throbbing headache associated with fever, chills and rigors. Two days later he developed progressive deterioration in level of consciousness, followed by generalized, tonic, clonic convulsion, lasting for 2 minutes. Cerebrospinal meningitis was suspected for which he was treated with parenteral crystalline penicillin and chloramphenicol without significant improvement. Further history revealed that the patient had been involved in a road traffic accident 4 months earlier with brief loss of consciousness followed by complete recovery. The patient was not a known hypertensive or diabetic.

Physical examination showed a temperature of 36.7°C, no pallor or jaundice.

Respiratory rate was 22 per minute, pulse rate 76 per minute and blood pressure 160/100mmHg. Chest and abdominal examinations were normal. The Glasgow coma score (GCS) was 13 (eye opening 3, best verbal response 4, best motor response 6). There was right hemiparesis, exaggerated reflexes, down going planter response on the right, nuchal rigidity and positive Kerning's sign. Fundoscopy showed bilateral papilloedema.

Peripheral blood film was negative for malaria parasites; there was a leucocytosis of $13.2 \times 10^9/L$ with neutrophils of 80% and lymphocytes 20%. Blood culture was sterile. Widal's test was negative and the serum was non-reactive for HIV 1 and HIV 2 antibodies. Serum electrolytes and urea were normal. A lumbar puncture showed clear cerebrospinal fluid, which was not under pressure and had normal biochemical and cellular findings and was sterile. A computed tomography (CT) scan showed a left parietal subdural haematoma with a mid line shift (Figure 1).

The patient had a burr hole and drainage of liquefied subdural haematoma with irrigation. No form of closed drainage system was employed.

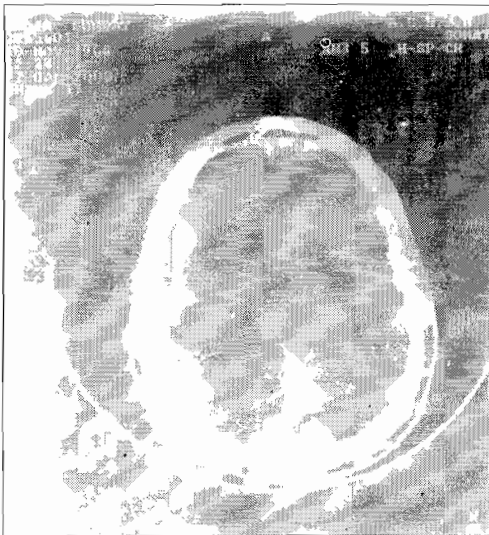
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Figure 1: CT scan showing left parietal subdural haematoma with mass effect



Figure 2: Postoperative CT Scan showing cortical re-expansion



Postoperatively the cortex re-expanded (Figure 2) and the patient made rapid recovery; the level of consciousness improved and normal power returned to the right upper and lower limbs. He was discharged from hospital 10 days after surgery with a GCS of 15 and has remained well at 6 months of follow up.

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Discussion

Chronic subdural haematoma mimics several neurological diseases and presentation is remarkably variable ranging from stroke, transient ischaemic attacks and seizures to Parkinsonism.¹⁻⁶ The patient in this report presented with features of cerebrospinal meningitis, which is a common medical problem in our environment. Initial treatment for this condition gave no improvement and further history revealed trauma 4 months earlier. CSH can be spontaneous or occur several weeks to months after trauma, particularly in the elderly. Markwalder² has noted that there is usually some history of trauma if adequate enquiry is made. Once the condition is suspected, a CT scan of the brain will be necessary to confirm the diagnosis.

Though not uncommon, the management of CSH has remained controversial, ranging from craniotomy and evacuation to craniostomy with irrigation² and craniostomy with closed system drainage.⁷ Craniotomy is useful where there is no facility for CT scan to localize the haematoma. Craniostomy with irrigation is standard treatment but use of closed system drainage may avoid the possibility of early postoperative clinical deterioration,³ particularly if perioperative cortical expansion is poor. A recurrence rate of 5% - 33%^{2,5,8,9} have been reported and require further surgery.

In conclusion, CSH haematoma may mimic medical neurological illness and should be suspected if there is no significant improvement on medical treatment. This is necessary to avoid morbidity and mortality.

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