Interhemispheric subdural hematoma case reports

2021

The case of an 81-year-old woman on hemodialysis with sudden nausea and vomiting. A computed tomography (CT) scan of the brain showed a bilaterally symmetrical increase in the thickness and density of the falx cerebri. At first, the findings were overlooked, but were later identified as an acute ISDH. The patient was treated conservatively and the symptoms completely resolved. The possibility of ISDH should be considered even if CT images of the brain are symmetrical [1].

A 25-year-old previously healthy man was involved in a traffic accident and presented to our ED with complaints of repeated vomiting and severe headache. On arrival to the ED, he had an initial Glasgow coma scale (GCS) of 14 (opening her eyes with verbal stimuli, obeys commands, orientated) and normal vital signs (blood pressure: 130/85 mm Hg; heart rate: 86 bpm). No other injuries were noted. Neurological examination revealed mild weakness of the right lower extremity (strength score: 4/5). His routine blood tests, including complete blood counts, prothrombin time, and thromboplastin time were unremarkable. The plain films of the skull were normal. Non-enhanced cranial (CT) scan performed 4 h after the accident revealed a small left-sided acute interhemispheric subdural hematoma, which was posteriorly located (Fig. 1a). Magnetic resonance imaging (MRI) of the brain during the first 24 h after admission confirmed minimal ASH in the posterior interhemispheric fissure with subacute subdural hematoma in the left parieto-occipital cortex and occipital regions (Fig. 1b). Considering the clinical condition of the patient, surgery was not planned by the neurosurgical department but the patient was kept under observation in the ED. He was discharged home 48 h after the trauma with a normal neurological examination and mild intermittent headaches [2].

A 51 year old man presented with headache and left sided numbness, 13 weeks after coronary artery bypass surgery. Unenhanced computed tomography of the head showed an acute interhemispheric subdural haematoma to the right of the falx⇑. He was managed conservatively with withdrawal of antiplatelet agents (aspirin and clopidogrel). Six weeks later, magnetic resonance imaging showed complete resolution and no underlying cause for the haemorrhage [3].

A 62-year-old man in whom this presentation was the result of the rare occurrence of an almost complete hemorrhagic transformation of a falcine meningioma with resultant acute interhemispheric subdural hematoma, and discuss the risk factors and possible mechanisms that may lead to such an event. The need for careful examination of the available radiology and aggressive tumor removal is stressed [4].

After head injury following road traffic accident revealing interhemispheric acute subdural hematoma.

The patient presented with a falx syndrome of contralateral hemiparesis, most marked in the lower extremity [5].

Two conservatively managed patients [6].

A 66-year-old woman reported a minor head trauma as a result of a fall and was admitted first to another hospital. On admission, her neurological examination showed no abnormality except headache. Initial nonenhanced computed tomography (CT) showed a left frontal ISH (Figure 1). Two days after she was noted to have marked right hemiparesis, especially in the right lower extremity. Nonenhanced CT obtained after development of the right hemiparesis demonstrated an increase in the size of the frontal ISH and a newly developed occipital ISH (Figure 2). She underwent conservative treatment, which did not improve the right hemiparesis. On 13 day after the trauma, she transferred to our hospital. Diffusion magnetic resonance images performed on arrival at our hospital showed no changes in the ISH and no infarction [7].

A case in a patient with normal bleeding parameters, which was managed with a twist drill craniostomy and drainage of the hematoma [8].

Two patients with acute interhemispheric subdural hematomas are reported, the controversial management of this rare entity is analysed. In reviewing current published cases of interhemispheric subdural hematoma, it seems that the outcome of an individual patient is not related to the therapeutic approach, but to the level of consciousness and the neurological condition on admission. Surgical and medical treatment indications are taken into account for management. A patient with ISH developed an extension of the hematoma to the convexity at 2 weeks of his clinical course, with a decline of his neurological condition. The hematoma was then evacuated through a parietal craniotomy with an uneventful postoperative course. Another case of ISH presented as headache and TIA, with spontaneous clinical improvement at 12 hours and with no decline in the patient's neurological condition. Management was conservative. In both cases the neurological examination was normal after 6 months. As in previously reported cases, the clinical and neurological condition of the patient on admission is crucial for the course of an ISH. Treatment strategies are based on the individual neurological response of each case and the risk-benefit ratio to decide on a medical or surgical approach [9].

A 74-year-old male presented with right hemiparesis greater in the lower than the upper extremity. He had no apparent head trauma. He had been treated with anticoagulants for cerebral and myocardiac infarction. Computed tomography (CT) and magnetic resonance imaging demonstrated an unusual combination of subdural hematomas in the interhemispheric space on the left, and the left temporoparietal and right frontotemporooccipital regions. The left convexity hematoma was irrigated through a single burr hole. Postoperatively, the size of the left convexity hematoma was diminished

and the left interhemispheric subdural hematoma disappeared. However, his consciousness deteriorated, and a second irrigation of the recurrent left convexity hematoma was performed 7 days after the first surgery. CT obtained 3 days after the second operation showed a right interhemispheric subdural hematoma, which diminished spontaneously. The convexity hematoma on the left reaccumulated, and was treated by shunting. His neurological status did not improve, and he died from myocardial infarction 39 days later. Irrigation of convexity hematoma may be effective to treat an associated ipsilateral interhemispheric subdural hematoma [10].

In 1995 Three case reports are presented, as well as a review of 64 cases described in the literature. The salient aspects of this clinical entity are discussed [11]

Fourty-eight cases of acute subdural hematomas was admitted to our hospital between 1977 and 1986, and three cases of them (6%) were located in the interhemispheric subdural space. In this paper, these three cases are reported with 20 documented cases. Case 1: an 81-year-old female was admitted to our hospital because of headache, nausea and vomiting. She hit her occiput a week ago. CT scan demonstrated contusion in the right frontal lobe and a high density in the interhemispheric space of the right frontal region. Her complaints disappeared gradually by conservative therapy and she returned to her social life. Case 2: a 50-year-old male fell downstairs and hit his vertex. As he lost consciousness, he was admitted to our hospital. He was stuporous and had left-hemiparesis. Skull X-ray film showed fracture line extending from the right temporal bone to the left parietal bone across the midline. CT scan revealed intracerebral hematoma in both frontal lobe and right parietal lobe and subarachnoid hemorrhage in the basal cistern and Sylvian fissure of the right side. And interhemispheric subdural hematoma in the right parietal region was visualized. Angiography demonstrated a lateral displacement of the right callosomarginal artery and an avascular area between the falx and the callosomarginal artery. After admission his consciousness recovered and convulsion was controlled by drug. Left-hemiparesis was improved by conservative therapy and he was discharged on foot [12].

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