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BRIEF REPORT

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A non-traumatic interhemispheric subdural haematoma: presented with headache as the sole complaint

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Abstract Due to their localisations and symptoms, interhemispheric subdural haematomas (ISH) compose a distinct category. Altered level of consciousness and hemiparesis are the most frequent symptoms. We report a case of ISH who presented with headache as the sole complaint. Left cerebellar haematoma and ISH were found in cranial MRI and cranial computed tomography Cranial MR angiogram was normal. Haemogram and coagulation parameters were within normal limits. ISH should be considered among the diagnostic possibilities in elderly patients who present with headache as the sole symptom without other clinical features such as meningeal irritation signs, focal neurological symptoms and alteration of consciousness. Cranial imaging studies should be done in such cases.

Key words Secondary headache • Interhemispheric subdural haematoma

Introduction

Interhemispheric subdural haematomas (ISH) compose a distinct category because of their localisations and symptoms. This entity was first described by Aring and Evans in 1940 [1]. ISH is one of the rarest forms of intracranial haemorrhages. It usually occurs after head trauma in patients with bleeding disorders, who may present with loss of consciousness, focal neurological symptoms or epileptic seizures [2]. We report a patient with ISH who presented with headache as the sole complaint.

Case report

A 78-year-old female was admitted to our hospital with the complaint of severe headache. She described a continuous vice-like pain prominent in the bilateral occipitotemporal region for 20 days and reported that it was the most severe pain she had ever suffered.

There was a history of hypertension, well regulated with medical treatment for 10 years, and chronic haematoma in left cerebellar hemisphere diagnosed seven months before admission. She reported an immediate hypertension attack and then complaint of imbalance at that time but not any headache. She did not report any head-neck trauma or sudden onset headache attacks in her life. There was no bleeding disorder or anticoagulant medication in her past medical history.

Neurological examination did not reveal any abnormality except the impaired tandem walk, which had also been detected in her previous admission to our outpatient clinic seven months earlier. Blood pressure was 120/75 mmHg and physical examination was completely normal.

Haemogram, coagulation parameters and routine chemistries were within normal limits. Chronic left cerebellar

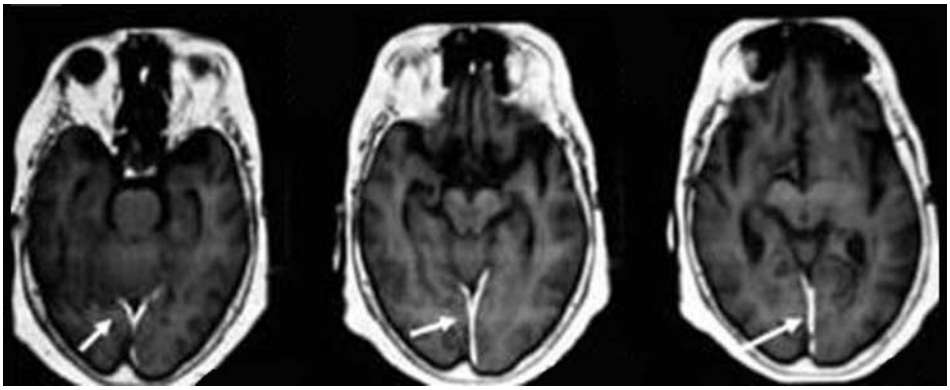

Fig. 1 Cranial MRI revealed chronic left cerebellar haematoma and arrowed hypointense lesion indicating interhemispheric subdural haematoma

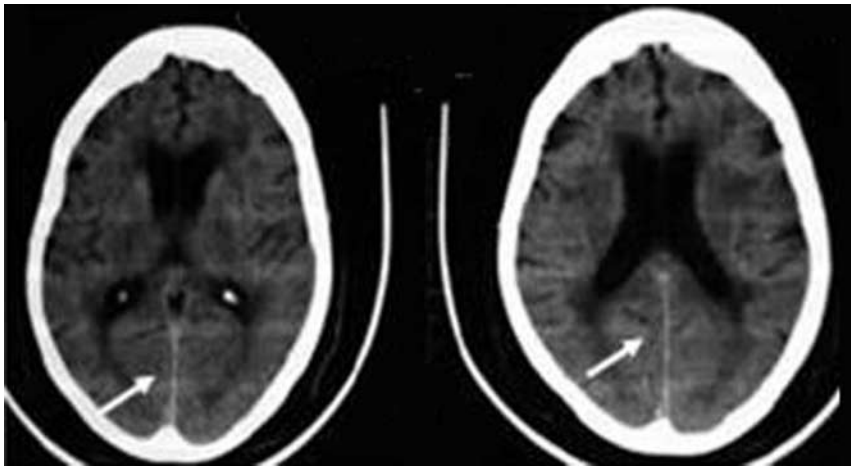

Fig. 2 Cranial CT revealed little resolution in arrowed hypodense lesion indicating interhemispheric subdural haematoma and chronic left cerebellar haematoma

haematoma and acute ISH were found in cranial magnetic resonance imaging (MRI) (Fig. 1). Cranial computed tomography (CT) revealed the same findings but little resolution in subdural haematoma at the end of the second week of follow up (Fig. 2). Cranial MR angiogram did not reveal any vascular abnormality.

Because of the stability observed in clinical follow up of our patient and the absence of any functional disturbance, conservative management was preferred and no surgical procedure was applied for ISH. The complaint of headache decreased gradually over two weeks and was absent in a control visit to our outpatient clinic at the end of the second month.

Discussion

ISH was first described by Aring and Evans in 1940 and was considered extremely rare until the development of imaging techniques like CT [1]. There have been only about 150 cases with ISH reported in the literature up till now [2–4]. So its natural history is yet to be determined in terms of origin and prognosis.

Head trauma (83%) and aneurysms (10%) are the most common underlying aetiologies [2, 5]. Anticoagulant medication and bleeding disorders are also known to make the patients prone to develop ISH. The most widely described clinical signs and symptoms associated with an ISH are hemiparesis (55.2%), loss of consciousness (38.8%), monoparesis in contralateral lower extremity (10.5%), generalised (10.5%) or focal (3%) epileptic seizures, language disturbances (4.5%) and dysfunction of the occulomotor nerve (3%) [5–7].

In this case the only symptom was the continuous vice-like headache prominent in bilateral occipitotemporal region. Any newly developed abnormality had not been detected in neurological examination. Only two ISH cases that presented with headache as the sole complaint have been reported in the literature until now, but there was also history of head trauma in all of these cases [8, 9]. A known bleeding disorder or anticoagulant medication was also present in the past medical history of many cases, unlike our patient [2, 5].

Although the mechanism of the haematoma formation in this region remained unclear, it seemed to be caused partially by rotational or linear cerebral acceleration injuries that cause laceration of parafalcic bridging veins [5, 9]. It should

also be remembered that risk factors for intracranial haemorrhages like vascular malformations, cerebral amyloid angiopathy and bleeding disorders commonly occur in elderly patients and those with subdural haematomas, who might not remember the minor traumas [10]. So even if there is no obvious history of head or neck trauma, ISH should be considered among the diagnostic possibilities in elderly patients who presented with newly developed headache as the sole symptom without other clinical features such as meningeal irritation signs, focal neurological symptoms or alteration of consciousness. Cranial imaging studies should be done in such cases.

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