Chronic Calcified Subdural Hematoma

Abdelilah Drissi*, A Maniani, Habibchorfa Sara, Abir Lemrabet Meriem Fikri, Mohamed Jiddane and Najwa Ech-Chrif El Kettani
Department of Neuroradiology, Mohammed V Military Hospital, Rabat, Morocco

Our case is about 18 year old male, with a history of hydrocephalus with a ventriculo-peritoneal shunt during his childhood, who was admitted to the emergency room for seizures. A cerebral CT was performed who shows a bilateral collection of the cerebral convexities, the left one has a thick hyperdense calcific margins which cross the suture lines related to a Calcified chronic subdural hematomas, ventricular bypass drain in place.

Discussion

The Chronic calcified subdural hematoma (HSDC) is arare entity, it presents 0.3 to 2.7% of chronic subdural hematomas, more frequently in children and young adults. It is a collection of blood between the arachnoid and the dura mater, the interval between the acute phase and the appearance of calcification varies from 6 months to several years [1,2]

Clinically it shares the same signs with chronic HSDs (seizures, focal neurological deficits or mental retardation) but may be asymptomatic. Standard X-ray of the skull shows a calcified lesion that fits the curvature of the skull. CT brain shows a hypodense extra-axial collection typically appears as a crescent-shaped with thick and calcified margins which cross the suture lines and exert a variable mass effect. A bilateral location gives a “double skull” appearance called the “Matroska head”. MRI is less sensitive than CT in detection of a calcified mass but it has an interest for evaluating the degree of adhesion of calcification to the underlying structures. The neurosurgical intervention is discussed case by case, depending on the prognosis and the degree of adhesion of the calcification to the underlying structures [3].

Figure 1: Cerebral CT: axial section parenchyma window (A) and axial section bone window (B) Shows a bilateral front parietal collection, the left one has a thick hyperdense calcific margins which cross the suture lines related to a Calcified chronic subdural hematomas, ventricular bypass drain in place.

Clinical-Medical Image

Our case is about 18 year old male, with a history of hydrocephalus with a ventriculo-peritoneal shunt during his childhood, who was admitted to the emergency room for seizures. A cerebral CT was performed who shows a bilateral collection of the cerebral convexities, the left one has a thick hyperdense calcific margins characteristic of a chronic calcified subdural hematoma (Figure 1).

Discussion

The Chronic calcified subdural hematoma (HSDC) is arare entity, it presents 0.3 to 2.7% of chronic subdural hematomas, more frequently in children and young adults. It is a collection of blood between the arachnoid and the dura mater, the interval between the acute phase and the appearance of calcification varies from 6 months to several years [1,2]

Clinically it shares the same signs with chronic HSDs (seizures, focal neurological deficits or mental retardation) but may be asymptomatic. Standard X-ray of the skull shows a calcified lesion that fits the curvature of the skull. CT brain shows a hypodense extra-axial collection typically appears as a crescent-shaped with thick and calcified margins which cross the suture lines and exert a variable mass effect. A bilateral location gives a “double skull” appearance called the “Matroska head”. MRI is less sensitive than CT in detection of a calcified mass but it has an interest for evaluating the degree of adhesion of calcification to the underlying structures. The neurosurgical intervention is discussed case by case, depending on the prognosis and the degree of adhesion of the calcification to the underlying structures [3].
**Final diagnosis**
Calcified chronic subdural hematoma

Three differential diagnosis:
- Calcified epidural hematoma
- Meningioma

Calcified empyema

**Keywords:** Malignant tumor; Chronic calcified subdural hematoma; MRI; HSDC

**References**

