

Calcifying pseudoneoplasm of the neural axis (CAPNON). First case reported in Cuba and literature review. Nilo Alvarez-Toledo MD; Juan Carlos Bermejo Sánchez; Yeinel Fernández Alvarez ABEL SANTAMARÍA CUADRADO GENERAL HOSPITAL

### INTRODUCTION.

Calcifying pseudoneoplasm of the neural axis (CAPNON), also known as brain stones or cerebral calculi, are extremely rare. Since Miller 1 reported the first case, in 1922, less than 70 cases have been reported all around the world. It is a non-neoplastic, slow growing, benign lesion, that affects the central nervous system. It can be localized into the cranium more frequently than the spine. The current case is the first reported in Cuba.

### **METHODS**

We present a case report taking the data from the clinical history of the patient and the radiological and histopathological reports.

# **RESULTS.**

CASE REPORT: A 50 years old, female, was admitted to the hospital after a generalized seizure, without previous medical history of epilepsy. The head CTscan showed a hyperdense mass in the right parietal lobe, with the same density of the bone. MRI showed a circumscribed, hypointese in T1- and T2weighted images without enhancement. The lesion was removed. Histopathology exam showed a calcified tissue with amorphous granular. Palisading cells were found around the edges as well as dystrophic calcifications, making the diagnosis of CAPNON. After one year of follow-up the patient is asymptomatic.

LITERATURE REVIEW: Less than 70 cases of CAPNON have been reported all around the world. The lesion can be found at any location of the neural axis, intracranial or spinal. The symptoms are secondary to the mass effect, being seizures the most common.

# Conclusions

The case is the first reported in Cuba with this extremely rare entity. The location and the radiological appearance may be confused with other calcified entities like meningiomas, oligodendrogliomas, astrocytomas, vascular malformations and other physiologic calcifications of the brain.

#### Learning Objectives

By the conclusion of this session, participants should be able to: 1. To add to their knowledge there are some frequent causes of circmbscribed, clacified lesions inside the cranium, but the calcifiying pseudoneoplasm of the neural axis is benign lesion that sould be in mind in the differential diagnosis.

2. To think about the possibility of including in the classification of CNS neoplasms of the World Health Organization (WHO) this new entity.

# Head CT Scan



COMPUTED TOMOGRAPHY IMAGES. The computed tomography images show a hyperdense, calcified lesion in the right parietal lobe in the X-ray image (A), the brain window (B) and the bone window (C).

#### PATHOLOGY. MACROSCOPIC APPEARANCE.



PATHOLOGY. Macroscopic appearance of the calcifying pseudoneoplasm of the neural axis (CAPNON).