CASE REPORT

We report the case of a 28-year-old male patient with no specific surgical or medical history, who consulted for subacute headaches without other associated clinical signs.

A brain computed tomography (CT) scan was performed in this patient. This contrast CT scan did not reveal any cerebral, ventricular, vascular, or other cerebral lesion.

Exploration of the skull in bone window and in 3D made it possible to visualize a huge bilateral and symmetrical dilation of the parietal foramina on either side of the sagittal suture, measured at 2 × 2.5 cm to the right and 2.3 × 2.7 cm to the left, giving the appearance of "eyes at the back of the head" (Figure 1A) and corresponding to a foramina parietalia permagna. To highlight the extent of the dilatation, we show an image of a small parietal foramina in another patient (Figure 1B).

DISCUSSION

"Foramina parietalia permagna," also called "The Catlin Mark," is a congenital anatomical variant with autosomal dominant inheritance. It is extremely rare, estimated 1 in 25,000 cases [1, 2]. Greig [3] considers it to be "sufficiently rare to make it desirable that every example be reported."

It corresponds to a lack of ossification of the posterior membranous parietal bones during embryogenesis, leaving open parietal foramina, on each side of the sagittal suture, ranging in size from a few millimeters to approximately 2 cm.

It is most often benign, causing at most headaches and vomiting, although associations have been reported with other congenital anomalies such as cleft palate, myelomeningocele, encephaloceles, epilepsy and other defects.

Family transmission seems to be the rule, as first observed in 16 of the 56 members of the Catlin family by Goldsmith (1922) [1]. Further studies have proven the relation with heterozygous mutations of the genes ALX4 on chromosome 11 and MSX2 on chromosome 5 [4].

These bone defects could be mistaken for osteolysis, trauma (gunshot), or iatrogenic (craniotomy). They could also be useful in postmortem identification by the skull, as part of thanatoradiology or a conventional autopsy.

CONCLUSION

Foramina parietalia permagna is a rare congenital anatomical variant that deserves to be known and
recognized, in particular by radiologists and forensic pathologists. It is most often benign but its discovery should lead to a search for other malformations that may be associated with it.

**Keywords:** Foramina parietalia permagna, Parietal bone, Parietal foramina

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**REFERENCES**


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**Conflict of Interest**

Authors declare no conflict of interest.

**Data Availability**

All relevant data are within the paper and its Supporting Information files.

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