

From Headache to Diagnosis: A Case of Pediatric Cerebral Abscess

Da Cefaleia ao Diagnóstico: Um Caso de Abscesso Cerebral Pediátrico

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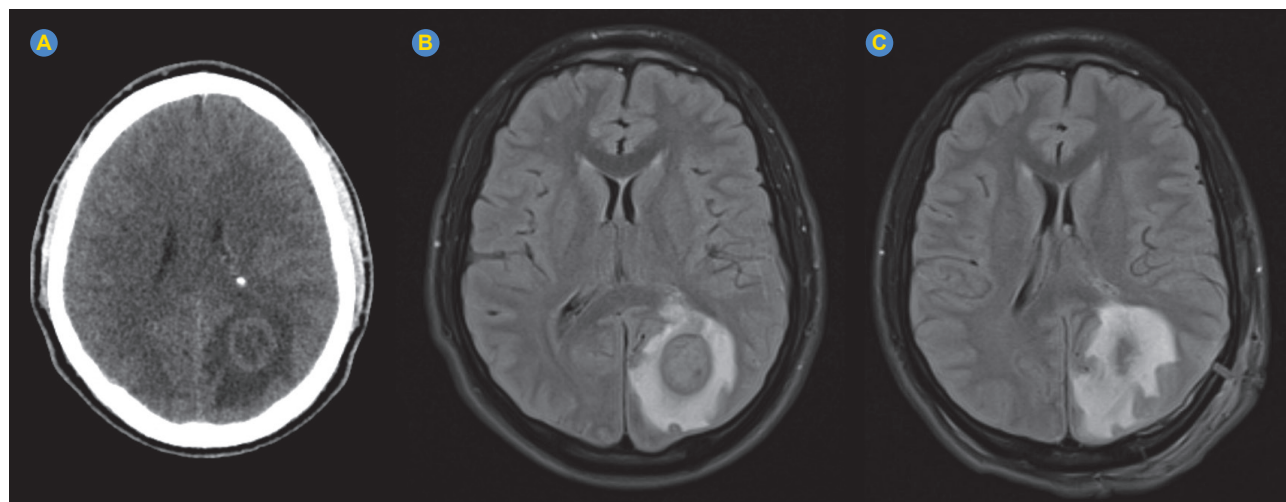


Figure 1 – Cerebral CT-scan revealing round lesion with mass effect and edema in the left occipital region (A). Cerebral MRI (T2/FLAIR) revealing a lesion with double rim sign highly characteristic of cerebral abscess (B). Cerebral MRI (T2/FLAIR) three days after surgical drainage (C).

A 17-year-old male patient presented to the emergency room with acute right retro-orbital and occipital headache worsened by cephalic movements and partially relieved with ibuprofen, along with vomiting and fever. The neurological assessment showed inferior-right quadrantanopia (not being able to see in one quarter of the visual field). A cerebral computed tomography (CT) scan showed a round lesion with mass effect in the left occipital region measuring 24 x 31 x 33 mm (Fig. 1A) raising suspicion of an abscess which was confirmed through magnetic resonance imaging (MRI) (Fig. 1B). Surgical draining was performed (Fig. 1C) and ceftriaxone and metronidazole were administered for six weeks. *Streptococcus intermedius* was identified in the pus. Evaluation by Otorhinolaryngology and Stomatology identified no signs of infection. Further investigation including a full-body CT-scan, echocardiogram, and immunodeficiency screening yielded no findings. At six-month follow-up, the patient was asymptomatic. Pediatric cerebral abscess is a rare life-threatening infection with an annual incidence of 0.5/100 000.^{1,2} Assessing contiguous site infection, hema-

togenous seeding, and immunodeficiency is crucial.³ However, in 20% of cases no etiology is identified.^{1,3}

AUTHOR CONTRIBUTIONS

AAB: Study design, literature search, data acquisition, writing of the manuscript.

IIAM: Literature search, writing of the manuscript.

SM: Literature search, data acquisition, critical review of the manuscript.

AMM: Literature search, critical review of the manuscript.

All authors approved the final version to be published.

PROTECTION OF HUMANS AND ANIMALS

The authors declare that the procedures were followed according to the regulations established by the Clinical Research and Ethics Committee and to the Helsinki Declaration of the World Medical Association updated in October 2024.

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DATA CONFIDENTIALITY

The authors declare having followed the protocols in use at their working center regarding patients' data publication.

PATIENT CONSENT

Obtained.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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