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Acute Anemia and Intracranial Hypertension - A case report

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Introduction

Acute anemia is commonly described as a risk factor for idiopathic intracranial hypertension (IIH). However, the relationship between anemia and IIH remains controversial. Larger controlled studies have failed to reveal an association between anemia and IIH, despite numerous case reports supporting their causal relationship. The most convincing evidence for a direct relationship between IIH and anemia comes from the observation that there is an improvement in symptoms and neurological signs only when addressing the underlying anemia. For this reason and others, such as the fact that many cases occur in non-obese individuals and that many patients with anemia and IIH do not respond to intracranial pressure reduction therapy, there is currently a question as to whether it is secondary intracranial hypertension or truly idiopathic.

Objective

To describe the case of a patient who developed intracranial hypertension in the context of acute anemia.

Case report

A 25-year-old woman, eutrophic, with no known comorbidities, presented with a new, bifrontal, pulsatile, progressive headache for 14 days, associated with tinnitus on the left, also pulsatile, photophobia, phonophobia, intermittent episodes of paresis and paresthesia in the upper limbs and visual clouding, both lasting up to 5 minutes, without nausea, vomiting or visual loss. During hospitalization, bilateral papilla edema was found and eyer ultrasound showed papilledema, grade III on the right and grade II on the left, computerized visual field showed right eye with nonspecific diffuse scotomas (MD -6.59; PSD 5.28) and left eye with inferior nasal scotomas (MD -3.29; PSD 5.21), brain magnetic resonance and magnetic resonance angiography were normal, cerebrospinal fluid without alterations, with an opening pressure of 15 cmH2O and was detected a microcytic and hypochromic anemia of iron deficiency etiology due to hypermetrorrhagia secondary to myomatosis, with a hemoglobin of 3.6 g/dL at the time. Blood transfusion was performed and abnormal uterine bleeding was treated with desogestrel, ferrous sulfate replacement and uterine myomatosis resection, with improvement of all symptoms. The patient was evaluated 8 months after hospitalization, without recurrence of headache, visual alterations and tinnitus and objective improvement was detected, with visual acuity 20/20 in both eyes, perimetry by confrontation without alterations and eye fundus with intact right optic disc, without regular blurring and contours and intact left optic disc, with discreet blurring in the upper nasal region.

Conclusion

In the case described, there was complete improvement of symptoms after addressing the anemia in a patient who did not have obesity and other well-described risk factors for IIH. Therefore, the possibility of acute anemia should always be considered in all patients with IIH, as treatment can prevent serious permanent complications of visual loss.

Keywords: Intracranial, Hypertension, Acute, Anemia, Papilledema