Case report

Pontine-bulbar hemorrhage in a complicated form of preeclampsia with eclampsia and HELLP syndrome : A Case Report

Abstract :

Pontine-bulbar hemorrhage in the absence of trauma or dislocation of the vessels is an uncommon complication.Hypertension is the typical cause, Less frequently, these hemorrhages accompany a hemorrhagic diathesis or vascular malformation. We report the case of pontine-bulbar hemorrhage following an eclampsia attack.

Keywords:

Pontine-bulbar, hemorrhage, eclampsia, HELLP syndrome, pregnancy, Case Report

Introduction

Pre-eclampsia is a specifically obstetric pathology, the prevalence of which is estimated to be between 1 and 2% of pregnant women and which, in its severe forms, can be life-threatening for the mother [1]. Eclampsia is defined as the occurrence of convulsions in a woman with pre-eclampsia. The relationship between eclampsia and cerebral hemorrhage has been recognized.

Case representation

Patient Information :

This is a 30-year-old parturient, single nulliparous, without cardiovascular risk factors, not vaccinated against SARS-CoV-2, current pregnancy not followed. Admitted to the obstetrical emergency room for eclampsia, the history of the disease goes back to the day of her admission by the installation of a generalized tonic-clonic crisis with reversion of the eyes and loss of urine in a context of apyrexia, the evolution was marked by the resumption of the consciousness after a post critical coma of 10 minutes.

Clinical Findings :

The clinical examination on admission found a blood pressure of 210/120 mmHg, heart rate of 110 beats per minute with a regular sinus rhythm and a saturation of 98% with room air, the Glasgow score was 15 in the post-critical period, the patient reported neurosensorial signs such as headache and ringing in the ears with epigastralgy, The neurological examination revealed a flaccid left hemiplegia with abolished ROT on the left and sharp on the right, the cranial pairs were intact, there were no language or comprehension disorders, the cardiovascular and respiratory examination was without particularity.The obstetrical examination showed an estimated gestational age of 25 weeks of amenorrhea, the uterine height was 20 cm, the fetal heart sounds were not perceived, the cervix was long and closed posteriorly, the parturient had a pelvis and a perineum without any particularities.

Diagnostic assessment :

The obstetrical ultrasound scan showed a Fetal In Utero Death, a biparietal diameter of 54 mm, an abdominal contour of 201 mm, and a femoral length of 31 mm The patient was admitted to the intensive care unit for management. The biological workup showed a Hb level of 13 g/dl, platelet count of 93,000, blood urea level of 0.33 g/l, creatinine level of 12.1 mg/l, transaminase level of 3 times normal, LDH level of 1,400 mg/l,

bilirubin level of 16 mg/l. In view of the neurological deficit, a cerebral MRI was performed, showing a pontine-bulbar hemorrhage [fig:1] and a vascular encephalopathy [fig:2].

Therapeutic interventions:

In the intensive care unit, the patient was put on antihypertensive treatment as well as magnesium sulphate with an electric syringe pump and protection against thromboembolic disease by means of compression stockings.
In view of the stability of the blood pressure figures and the improvement of the cytolysis and the platelet count, the decision was made to favour the vaginal route, the gynecological examination did not find any contraindication to the vaginal route

Follow-up and outcome of interventions:

The patient expelled a stillborn baby at 12 hours of her admission to the intensive care unit.

Discussion

The morbidity and fatality rates associated with stroke are extremely high. However, it is becoming more common among postpartum and pregnant women [3]. The occurrence of hypertension during pregnancy exposes to an increased risk of stroke [4]. A 2011 study showed that the stroke rate is estimated to be 25-34 cases per 100,000 deliveries, as well as the direct involvement of hypertensive disorders in the occurrence of stroke [5]. Intracranial hypertension in eclampsia must be closely managed with antihypertensive and anticonvulsant drugs, including magnesium sulfate [6], as hemorrhagic lesions have a particularly poor prognosis. Because eclampsia is most often a complication of poorly attended pregnancies, the most effective strategy for detecting preeclampsia is to monitor blood pressure levels during the second and third trimesters of pregnancy. Several therapeutic agents are used as preventive measures for eclampsia. Currently, aspirin therapy has been shown to be effective in terms of prevention [7]. Indeed, a prospective randomized study showed a significant decrease in the rate of pre-eclampsia in the group of women with a major obstetrical history treated with 150 mg/d of aspirin and 300 mg/d. In practice, doses of 50 to 100 mg/d are used at 14 weeks if there is a pathological history or at 22 weeks if the doppler is pathological [7].

Conclusion : Our case suggests the importance of the consulting neurologist's knowledge of the HELLP syndrome and the need for thorough laboratory tests and close monitoring of patients with headache and hypertension.

Informed Consent: Clear consent was obtained from the patient before publication of this observation.

Figure 1 : Brain Magnetic resonance imaging showing a pontine-bulbar hemorrhage

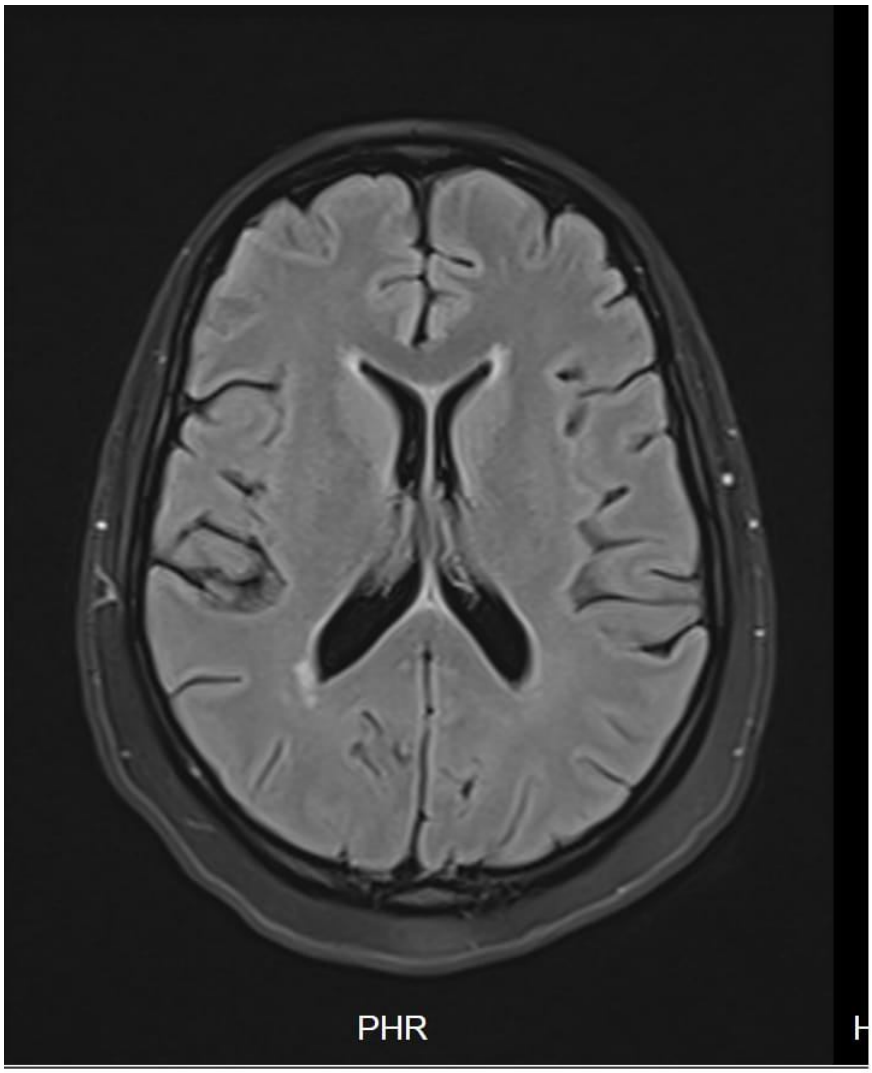

Figure 2 : Brain Magnetic resonance imaging showing a vascular encephalopathy

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