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Postpartum headache: sinus venous thrombosis

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DESCRIPTION

A 25-year-old woman with a personal history of a recent epidural anaesthesia for vaginal delivery. Four days later was attended in the emergency department by persistent headache. In the physical examination there was not nuchal rigidity nor neurological abnormalities. Initially hydration, analgesic drugs and lying down with bed rest were the treatment for a suspected postdural puncture headache. Due to a lack of relieve with this treatment an urgent brain CT scan was performed because of MRI was not available. It showed a cerebral venous sinus thrombosis (figures 1–3). The patient was admitted in the intensive care unit (ICU) and was treated with systemic anticoagulation therapy with continuous intravenous heparin sodium, during the admission the patient started to improve and after 4 days was discharged to the neurology ward. Three months after

ICU discharge neurologist indicated to perform thrombophilic tests: lupus anticoagulant, anticardiolipin antibody, complete blood count, prothrombin time, partial thromboplastin time, thrombin time, fibrinogen test, factor V Leiden, protein S and protein C, D dimer, homocysteine levels and factor V Leiden and G20210A mutation of prothrombin gene. Normal laboratory test results were obtained.

Postdural puncture headache developed within 48 h of the epidural anaesthesia, typically symptoms improve with rest in a supine position avoiding standing or raising the head from the bed. The lack of response to treatment led to perform a brain CT scan to rule out other causes of puerperium headaches.

Pregnancy-induced hypertension, migraine, intracranial bleed, cerebral vein thrombosis, cerebral tumour and

Figure 1 Non-contrast enhanced computed axial cranial tomography. Non-enhanced CT with a focus of hyperdensity within the occluded sinus.

Figure 2 Contrast enhanced computed axial cranial tomography.

Figure 3 Contrast enhanced computed sagittal cranial tomography. Contrast-enhanced sagittal CT with the 'empty delta sign'.

meningitis are included in the differential diagnosis of persistent headache in the puerperium. The hypercoagulable state of pregnancy predisposes women to cerebral thrombosis. Sinus venous thrombosis often occurs in young people, it is a rare subtype of stroke with a difficult diagnosis and an unknown incidence. The treatment with heparin in the acute phase is safe and is likely to improve its outcome. Postdural puncture headache is suspected with the combination of headache, pregnancy and dural puncture but this is not the only cause of such a headache, further investigations are necessary with the lack of response to postural treatment in postpartum headache.

Competing interests None.

Patient consent Obtained.

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