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Case Report: Benign Intracranial Hypertension as a Cause of Post Epidural Headache

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Introduction: Benign intracranial hypertension (BIH) is characterised by increased intracranial pressure in the absence of intracranial abnormality. We describe a case of a multiparous woman with a history of chronic headaches, who after receiving an epidural, developed symptoms consistent with a post-dural puncture headache and was treated with a blood patch. The patient was later diagnosed with BIH.

Case History: A 24-year-old multiparous woman, with a BMI 36, requested an epidural during labour. The epidural was sited first time uneventfully. A healthy baby was born by forceps delivery via an epidural top-up. At 12 hours post partum, the patient complained of a postural occipital headache. Although the patient described having a chronic postural headache, worse when supine, which had become more noticeable during her pregnancy, this headache was considerably worse since having had the epidural. A probable post-dural puncture headache was diagnosed and a blood patch was performed. After initially providing relief, the headache returned and a further blood patch was offered but declined. Eighteen months later, during her third pregnancy, the patient was admitted to hospital with worsening of her chronic postural headache and papilloedema. The patient had a normal MRI and a lumbar puncture, which illustrated raised cerebrospinal fluid pressure (CSF) with normal composition. A diagnosis of BIH was made.

Discussion: Pregnancy has shown to promote or worsen BIH. The gravid uterus increases intra-abdominal pressure, impeding cerebral venous return leading to increased intracranial pressure. Management of labour analgesia is controversial in patients with BIH.[1,2] Uterine contractions are associated with increased intracranial pressure that becomes more marked during periods of inadequate analgesia. Epidural analgesia minimises the haemodynamic changes during contractions, resulting in minimal effect on intracranial pressure.[2] Opioid analgesics may increase pCO2 via respiratory depression, thereby increasing cerebral blood flow and intracranial pressure. Post lumbar puncture headaches tend not to occur in patients with BIH as CSF drainage can be therapeutic. This case highlights the importance of not always assuming the diagnosis of a post dural puncture headache in patients suffering from a headache following neuro-axial blockade. An early diagnosis of BIH in this patient may have prevented papilloedema. A thorough history is imperative to elucidate the cause of any post partum headache.

References