Utility of CSF pressure monitoring to identify idiopathic intracranial hypertension without papilledema in patients with chronic daily headache.

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Source

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Abstract

The aim of the present study was to report on the utility of continuous Pcsf monitoring in establishing the diagnosis of idiopathic intracranial hypertension without papilledema (IIHWOP) in chronic daily headache (CDH) patients. We report a series of patients (n = 10) with refractory headaches and suspected IIHWOP referred to us for continuous Pcsf monitoring between 1991 and 2000. Pcsf was measured via a lumbar catheter and analysed for mean, peak, highest pulse amplitude and abnormal waveforms. A 1-2 day trial of continuous controlled CSF drainage (10 cc/ h) followed Pcsf monitoring. Response to CSF drainage was defined as improvement in headache symptoms. Patients with abnormal waveforms underwent a ventriculoperitoneal (VPS) or lumboperitoneal (LPS) shunt insertion. All patients had normal resting Pcsf (8 +/- 1 mmHg) defined as ICP < 15 mmHg. During sleep, all patients had B-waves and 90% had plateau waves or near plateau waves. All patients underwent either a VPS or LPS procedure. All reported improvement of their headache after surgery. Demonstration of pathological Pcsf patterns by continuous Pcsf monitoring was essential in confirming the diagnosis of IIHWOP, and provided objective evidence to support the decision for shunt surgery. Increased Pcsf was seen mostly during sleep and was intermittent, suggesting that Pcsf elevation may be missed by a single spot-check LP measurement. The similarity between IIHWOP and CDH suggests that continuous Pcsf monitoring in CDH patients may have an important diagnostic role that should be further investigated.

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PMID: 15154860 [PubMed - indexed for MEDLINE]