Elevated Intracranial Pressure in Patients with Spontaneous Cerebrospinal Fluid Otorrhea

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ABSTRACT

Objective: To determine the prevalence of elevated intracranial hypertension in patients with spontaneous cerebrospinal fluid otorrhea (SCSFO).

METHODS

Subjects and Methods: Patients included have undergone operative repair of spontaneous CSF otorrhea between January 2007 and May 2012. Lumbar puncture opening pressure was used to measure intracranial pressure (ICP) 6 weeks after surgery. Preoperative magnetic resonance imaging was also reviewed for evidence of elevated ICP.

RESULTS

Twenty-two patients underwent postoperative LPOP measurement. Opening pressures ranged from 10-55 cm/H20, and 8 patients (36.4%) had an elevated ICP (>20 cm/H20). Two patients (9.1%) met the modified Dandy LPOP criteria for IIH (>25 cm/H20). All patients with elevated LPOP were female. There were no significant differences in age or BMI in patients with or without elevated LPOP.

CONCLUSIONS

While elevated ICP is a common finding in patients with SCSFO, only a minority of patients have elevated pressure by LPOP or MRI findings. This may indicate that while elevated ICP may contribute to the development of some cases of SCSFO, it is not a universal finding. Other etiologies, such as a congenitally thin skull base or arachnoid granulations may be a more common etiology of SCSFO.

REFERENCES