Lumboperitoneal shunt for idiopathic intracranial hypertension

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- Diagnostic efficacy of radionuclide scintigraphy in detecting lumboperitoneal shunt obstructions in idiopathic hydrocephalus and intracranial hypertension
- Idiopathic Intracranial Hypertension: Clinical-Epidemiological Profile and Factors Associated with Visual Outcome
- Spontaneous cerebrospinal fluid rhinorrhea as a primary presentation of idiopathic intracranial hypertension, management strategies, and clinical outcome
- Atypical Presentation of Idiopathic Intracranial Hypertension: A Case Series and Literature Review
- Effectiveness and Safety of Ventriculoperitoneal Shunt Versus Lumboperitoneal Shunt for Idiopathic Intracranial Hypertension: A Systematic Review and Comparative Meta-Analysis
- Ventriculo-atrial shunt in idiopathic intracranial hypertension
- Myelin oligodendrocyte glycoprotein (MOG) associated optic neuritis in a patient with idiopathic intracranial hypertension (IIH) and compressive optic neuropathy case report
- Surgical management of pseudotumor cerebri syndrome: A single center experience with endoscopic optic nerve decompression and CSF diversion procedures

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see also Ventriculoperitoneal shunt for idiopathic intracranial hypertension.

Lumboperitoneal shunt for idiopathic intracranial hypertension had been favored by many investigators for CSF diversion for decades; however, it has been associated with various side effects. Because of the small ventricular size adequate positioning of a ventricular catheter is challenging.

Complications

Complications following lumboperitoneal (LP) shunting have been reported in 18% to 85% of cases. The need for multiple revision surgeries, development of iatrogenic Chiari malformation, and frequent wound complications have prompted many to abandon this procedure altogether for the treatment of idiopathic benign intracranial hypertension (pseudotumor cerebri), in favor of ventriculoperitoneal (VP) shunting [1)].

Case reports

A 31 year old woman was diagnosed with pseudotumour cerebri following development of headaches, loss of vision, and papilledema, in association with a cerebrospinal fluid (CSF) opening pressure of 36 cm H2O. Cranial imaging showed an attenuated ventricular system and no other abnormality. In particular, the posterior fossa was satisfactory in appearance. She was treated with lumboperitoneal shunt insertion, with resolution of her symptoms.

Twelve months later, the patient reported a 6 month history of left hemisensory loss, left arm weakness, and unsteadiness. Neurological examination revealed wasting and reduced power of the intrinsic muscles of the left hand, and left-sided hyperaesthesia to pin-prick. Magnetic resonance (MR) imaging showed the development of cerebellar tonsillar descent and syringomyelia through- out the cervico-thoracic spinal cord. The patient underwent insertion of a low pressure ventriculoperitoneal shunt and removal of the lumboperitoneal shunt, with subsequent symptomatic improvement. There was, however, no resolution of the syrinx on follow up MR imaging.

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Menger RP, Connor DE Jr, Thakur JD, Sonig A, Smith E, Guthikonda B, Nanda A. A comparison of lumboperitoneal and ventriculoperitoneal shunting for idiopathic intracranial hypertension: an analysis of economic impact and complications using the Nationwide Inpatient Sample. Neurosurg Focus. 2014 Nov;37(5):E4. doi: 10.3171/2014.8.FOCUS14436. PubMed PMID: 25363432.