Idiopathic intracranial hypertension medical treatment

- Myelin oligodendrocyte glycoprotein antibody-associated disease with aseptic meningitis-like presentation in a paediatric patient
- Signs of Intracranial Hypertension in Chronic Inflammatory Polyradiculoneuropathies-A Cross Sectional Cohort Study
- PROACTIVE EXTERNAL LUMBAR DRAINAGE USE IN PEDIATRIC IDIOPATHIC INTRACRANIAL HYPERTENSION AND PROPOSAL OF A NEW TREATMENT ALGORITHM
- Transverse venous sinus stenting versus cerebrospinal fluid shunting in idiopathic intracranial hypertension: a multi-institutional and multinational database study
- Effectiveness and tolerability of liraglutide as add-on treatment in patients with obesity and high-frequency or chronic migraine: A prospective pilot study
- Weight management in idiopathic intracranial hypertension: A role for precision medicine in obesity therapeutics
- A prospective, randomised comparative study to evaluate safety, tolerability, and efficacy of topical minocycline gel 4% plus oral isotretinoin against oral isotretinoin only in Indian patients with moderate-to-severe acne vulgaris
- Factors influencing the efficacy of surgical repair for spontaneous middle cranial fossa CSF leaks: a systematic review and meta-analyses

Medical treatment for idiopathic intracranial hypertension (IIH) focuses on reducing intracranial pressure (ICP) and managing symptoms to prevent complications.

Medications

1. **Furosemide**: A diuretic that can help reduce fluid volume and lower ICP, often used in conjunction with acetazolamide.
2. **Topiramate**: An anticonvulsant that has been shown to have a similar effect to acetazolamide in reducing ICP and can also help with headaches and weight management.
3. **Corticosteroids**: Such as dexamethasone, used in acute cases or when IIH is associated with inflammatory conditions. However, their use is generally limited to short-term due to potential side effects.
4. **Other Medications**: Pain management and medications for associated symptoms (e.g., analgesics for headaches) may be used.

2. **Weight Management:**

1. **Diet and Exercise**: Weight loss can significantly improve symptoms and reduce ICP in overweight or obese patients. A structured weight loss program involving diet and exercise is often recommended.

3. **CSF Reduction Techniques:**

1. **Lumbar Punctures (LPs)**: Repeated lumbar punctures can provide temporary relief by removing CSF and lowering ICP. This is typically a short-term measure and may be repeated as needed.

2. **Cerebrospinal fluid shunts**: In cases where medical management and lumbar punctures are insufficient, a ventriculoperitoneal (VP) shunt or lumboperitoneal (LP) shunt can be placed to continuously drain CSF and reduce ICP.

4. **Monitoring and Follow-Up:**

1. **Regular Assessments**: Frequent monitoring of ICP and visual function is crucial. This might include repeat lumbar punctures, imaging studies (e.g., MRI), and visual field testing to assess the effectiveness of treatment and progression of the disease.

5. **Management of Complications:**

1. **Papilledema**: Regular eye exams are necessary to monitor for vision changes or damage. In severe cases, more aggressive treatments or surgical interventions may be required to prevent permanent vision loss.

6. **Management of Associated Conditions:**

1. **Addressing Underlying Factors**: If IIH is secondary to another condition, such as medication-induced or associated with a specific disease, treating or adjusting the underlying condition is essential.

Summary: - **Acetazolamide** and **furosemide** are typically first-line treatments for IIH. - **Weight management** is crucial, especially in overweight or obese patients. - **CSF reduction techniques**, like lumbar punctures and shunts, may be needed for more severe cases or when medication is insufficient. - Regular monitoring and management of complications are essential to prevent long-term damage.

The treatment approach is individualized based on the severity of symptoms, response to medication, and the presence of any complications.

A trial of bumetanide (0.25 mg daily) monotherapy was successful in resolution of a patient's symptoms. These results suggest bumetanide could be effective in the treatment of idiopathic intracranial hypertension, perhaps by restoring the balance between cerebrospinal fluid formation and absorption and/or by altering the volume or ionic composition of the brain's extracellular fluid compartment [1)].

Acetazolamide

see Acetazolamide for idiopathic intracranial hypertension treatment.

Acetazolamide and weight loss effectively improve Retinal nerve fiber layer (RNFL) thickness, total retinal thickness (TRT), and optic nerve (ONH) volume swelling measurements resulting from papilledema. In contrast to the strong correlation at baseline, optical coherence tomography (OCT) measures at 6 months show only moderate correlations with papilledema grade [2)].

1)
Kahle KT, Walcott BP, Staley KJ. Resolution of headache and papilledema in idiopathic intracranial hypertension associated with inhibition of Na+-K+-2Cl- cotransport. J Child Neurol. 2011 Feb;26(2):205-8. doi: 10.1177/0883073810391264. PubMed PMID: 21285039.
2)
The Optical Coherence Tomography Substudy Committee And The Nordic Idiopathic Intracranial Hypertension Study Group. Papilledema Outcomes from the Optical Coherence Tomography Substudy of the Idiopathic Intracranial Hypertension Treatment Trial. Ophthalmology. 2015 Jul 18. pii: S0161-6420(15)00549-7. doi: 10.1016/j.ophtha.2015.06.003. [Epub ahead of print] PubMed PMID: 26198807.