

## Idiopathic Intracranial Hypertension (IIH)

Idiopathic intracranial hypertension (IIH), also known as pseudotumor cerebri, is a condition in which there is an increased pressure within the skull. This can cause symptoms such as headaches, visual changes, ringing in the ears, and neck pain.

IIH is considered an uncommon condition, affecting almost exclusively women who are overweight or have a history of hormonal changes such as pregnancy or polycystic ovary syndrome, the use of birth control pills or hormonal replacement therapy.

Symptoms can include:

- Headaches, often located behind the eyes, that are usually worse in the morning or with changes in position. It is important to note that headaches occur independent of the pressure and should not be used in isolation to decide about the need for lumbar puncture and other invasive procedures to manage IIH
- Visual changes, such as double vision, blurry vision, and difficulty with peripheral vision
- Ringing in the ears (tinnitus)
- Neck pain and stiffness
- Nausea and vomiting

The diagnosis of IIH is made by a combination of symptoms and investigations, which may include:

- A thorough medical history and physical examination
- Neurological examination, including an eye exam
- Imaging studies, such as a magnetic resonance imaging (MRI) scan, to rule out other causes of the symptoms
- Lumbar puncture (also known as a spinal tap) to measure the pressure of the cerebrospinal fluid (CSF) surrounding the brain and spinal cord.

The goal of treatment is to reduce the pressure within the skull and prevent permanent vision loss.

The treatment options include:

1. Weight loss: Weight loss is recommended first-line for individuals as it can lead to a reduction in the symptoms of IIH

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2. Medications: Diuretics such as acetazolamide, furosemide or topiramate can be prescribed to reduce the production of cerebrospinal fluid and thus decrease the pressure within the skull. Headache preventatives are also used.
3. Surgery: In rare cases, if medications and weight loss do not help in reducing the symptoms, surgery may be necessary to relieve the pressure within the skull. The most common surgery is a procedure called optic nerve sheath fenestration which involves making a small opening in the membrane covering the optic nerve to relieve the pressure. Venous sinus venoplasty can also be used if imaging and pressure monitoring suggests narrowing of the veins around the brain is contributing to the symptoms. In severe cases, shunt placement to drain the excess cerebrospinal fluid may be necessary.

It is essential for individuals with IIH to have regular check-ups with their eye specialists and neurologist to monitor their symptoms and treatment response.

Untreated IIH can lead to permanent vision loss and therefore it is essential to follow the recommended treatment plan.

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