

Upright headaches? Think CSF!

A cerebrospinal fluid (CSF) leak is a serious and often incapacitating medical condition stemming from a tear or hole in the membrane that contains the fluid surrounding the spinal cord and brain. It can occur in the head or spine as result of trauma, surgery, an underlying disorder or spontaneously. When fluid leaks out, intracranial pressure and CSF volume reduces (known as intracranial hypotension) which allows the brain to sag within the skull. As a result of this 'brain sag', sufferers may experience severe and unrelenting head pain, pressure, visual disturbances, hearing impairment, tinnitus, muscle twitches, spasms and a wide range of other symptoms.

VERTICAL POSITION

Intracranial hypotension is responsible for many CSF leak symptoms. It normally has a prominent postural element; pain and other symptoms are worse when upright. Sometimes onset may occur immediately, but symptoms can build slowly over a number of hours to become a 'second half of day headache'.

1.

HORIZONTAL POSITION

Symptoms may be entirely relieved or significantly reduced by lying down (often with head lower than feet). The postural element may, however, reduce over time, and lying down may then provide less relief.



HEADACHE PRESSURE AND SENSATIONS

- Pressure feeling within the skull
- 'Pulling' sensation from the head to neck

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SPINAL AND CRANIAL CEREBROSPINAL FLUID

- Rarely, pockets of leaked CSF are seen in the skin, however majority of spinal leaks are seen externally
- Cranial leaks may present as a 'leak' from nose, ears and drainage

6.



EYE PAIN / PHOTOPHOBIA

- Pain behind the eyes
- Pain when looking
- Sensitivity to light (photophobia)
- Visual field defects

8.

LEAK FACT

Research shows that at least **5 in 100,000** people each year are affected by spontaneous CSF leaks, with many more suffering from iatrogenic or traumatic CSF leaks. **They are not rare**, yet are generally under-diagnosed; misdiagnosis of migraine, sinusitis, NPDH, tension and other headache disorders is common place, and on average correct diagnosis takes **13 months** from onset.

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