

Headache and ear nose and throat problems

Many ear, nose and throat disorders can cause or contribute to headache. This can be due to 'referred pain', which is when pain in one area of the body is transferred to another area nearby. The main sensory nerve to the sinuses, nose and face (the trigeminal nerve) also has connections with the nerves of the head and upper neck.

If problems such as a sinus infection trigger pain in one of the branches of the trigeminal nerve, the sensation can travel along these connections and precipitate headache. The treatment for headache triggered by ear, nose and throat problems varies according to the cause. One of the most common triggers is sinus congestion.

Sinus problems can cause headaches

The sinuses are the air-filled cavities inside the skull that make up part of the respiratory system. The main sensory nerve to the sinuses, nose and face (the trigeminal nerve) also has connections with the nerves of the head and upper neck. This is why a sinus infection can commonly result in face pain and headache. Causes of sinus congestion include the cold, flu, hayfever or other allergic reaction, and sinusitis (infection of the sinuses). Treatment includes:

- Medications such as nasal decongestants, in the form of either tablet or nasal spray
- Antibiotics in the case of bacterial infection
- Irrigation with salt water solutions
- Surgery, if chronic sinus problems can't be solved with any other type of treatment.

Ear problems can cause headaches

The ear is made up of three parts: the outer, middle and inner ear. Problems can affect any one of these parts and bring on associated headache. Some of the more common ear problems include:

- **Infection** – caused by either viral or bacterial agents. Symptoms include pain, deafness, discharge and problems with balance.
- **Labyrinthitis** – the general term for any type of inflammation of the inner ear. Symptoms include dizziness, ringing in the ear (tinnitus) and headache.
- **Trauma** – such as blows to the ear, perforation of the eardrum or foreign bodies lodging inside the canal.
- **Tumours** – benign or malignant tumours of the ear are relatively uncommon but have been known to cause associated headache.

Nose problems can cause headaches

There are various disorders of the nose that can cause or contribute to headache. Some of the more common include:

- **Hayfever** (allergic rhinitis) – the immune system overreacts to such irritants as pollen or animal dander, causing symptoms including nasal congestion, watering and itchy eyes, and headache. Treatment includes avoidance of known triggers and drugs such as antihistamines.
- **Hormonal rhinitis** – some women experience nasal congestion and stuffiness during pregnancy. This is caused by hormones. The only real cure for hormonal rhinitis is delivery.
- **Inflammatory rhinosinusitis** – this inflammation of the nose and sinuses is caused by a number of autoimmune diseases, such as systemic lupus erythematosus. Treatment involves treating the underlying disorder.

- **Non-allergic rhinitis** – which is similar to allergic rhinitis, but with no identifiable trigger to the reaction. Treatment includes antihistamines.

Throat problems can cause headaches

There are various disorders of the throat that can cause or contribute to a headache. Some of the more common include:

- **Tonsillitis** – the tonsils sit at the back of the throat and form part of the body's immune system. They can become infected by viruses or bacteria. The most common cause of tonsillitis is the bacterium *streptococcus*. Treatment includes antibiotics, painkillers and plenty of fluids. In chronic cases, surgical removal of the tonsils may be required.
- **Abscesses** – sometimes complications of tonsillitis, dental infection or tumours can cause throat pain and associated headache.
- **Inflammation or degeneration of the cervical spine** - degeneration of the vertebrae, commonly caused by diseases such as osteoarthritis or spinal cord tumours.
- **Tumours** – both benign and malignant tumours inside the throat can cause pain and headache by pressing on associated nerves or blood vessels. Heavy smokers and drinkers should seek immediate medical attention if they experience one-sided ear pain, as this may be symptomatic of cancer of the tonsil, tongue, larynx or pharynx (throat and voice box).

Seek medical advice for headaches

Headache and migraine can be caused by many contributing factors working together. That's why professional advice is needed to investigate and properly diagnose the specific factors behind a person's recurring headache. Other triggers may include muscular tension, diet, poor posture and some medications.

Where to get help

- Your doctor
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Ear, nose and throat specialist

Things to remember

- A central nerve services the face, nose and sinus, so problems with these structures can refer pain into the head and cause headache.
- A variety of disorders of the ear, nose and throat can cause associated headache.
- Since recurring headache may be caused by different factors working together, it is important to seek professional advice.

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