

Tinnitus

Tinnitus is a noise such as a ringing or buzzing that you can hear, but the noise does not come from outside your ear. Many people have mild tinnitus that is not too bad. However, about 1 in 100 people have tinnitus which severely affects their quality of life. In many cases the cause is not known. In some cases the tinnitus is related to another problem. For example, it is common for people with age-related deafness to also develop tinnitus. There is no cure which will take the noise away. However, there are ways that can make the tinnitus less intrusive and troublesome.

What is tinnitus?

Tinnitus is an abnormal noise (or noises) that you can hear. However, the noise does not come from outside your ear. The sort of noises that people hear include: ringing, buzzing, whistles, roaring, humming, machine type noises, etc. Sometimes the noise pulsates at the same rate as your pulse. Tinnitus can be either constant or 'come and go'. It can vary in loudness and character from time to time. You can hear the noise or noises in one ear, in both ears, or it may be difficult to pinpoint where the noise seems to come from.

The noise is often more prominent when you are in a quiet place. For example, when you are in bed and trying to get to sleep. It may also be more noticeable when you are tired. Some people with tinnitus are also more sensitive to normal everyday sounds. For example, some people with tinnitus find that a radio or TV is painfully loud when it is at a normal volume for most people.

How common is tinnitus?

Tinnitus is common and can occur at any age. Most people have an occasional episode of tinnitus after going to a loud concert or disco. For most people, this is temporary and soon goes. As many as 1 in 6 people have persistent tinnitus that is mild and not very troublesome. However, about 1 in 100 people have tinnitus which persists most of the time, and severely affects their quality of life.

What causes tinnitus?

In many cases

In many people with tinnitus, the cause is not known. The ear is otherwise fine. What seems to happen is that signals are sent from the ear down the ear nerve to the hearing part of the brain. The brain interprets these signals as noise. It is not clear why these signals are sent from the ear. The noise may also originate somewhere else in the hearing nerve pathways in the brain.

In some cases

Sometimes the tinnitus is caused by another condition. For example:

- Tinnitus often develops at the same time as the hearing loss of older age.
- Meniere's disease. In this condition you develop attacks of vertigo (dizziness), hearing loss and tinnitus. It is due to a problem of the cochlea (in the inner ear).
- Exposure to very loud noise. Some people develop persistent tinnitus after being subjected to loud noise for a long time. For example, after years of working in a loud factory. Sometimes permanent tinnitus persists after a 'one off' loud noise experience. For example, following a rock concert.
- As an uncommon side-effect to some medicines. For example, aspirin and quinine.
- Following an ear or head injury.

- Some other ear disorders such as otosclerosis.
- Some uncommon diseases of blood vessels, brain or nerves can cause tinnitus. In these situations you are likely to have other symptoms or signs such as nerve weakness, etc. However, rarely, tinnitus may be the first symptom to develop.
- An ear infection. The tinnitus tends to clear when the infection clears.
- Psychological factors may have a role to play. For example, mild tinnitus that is not bothersome may become more bothersome if you become depressed, anxious or stressed.

Do I need any tests?

A doctor will usually examine your ears, and the nerves around your face and ears. A hearing test is usually done. An underlying ear problem can usually be ruled out by this examination and hearing test.

Further tests such as a brain scan are done in some cases. For example, this may be advised if you have one-sided tinnitus and an underlying brain disorder is suspected.

Can anything help or cure tinnitus?

In a small number of cases there is an underlying cause which may be corrected. For example, if a side-effect of a medicine that you are taking is causing tinnitus, then a change of medication may cure the problem.

In most cases there is no easy cure. Some people are helped by understanding the problem and knowing that they do not have a serious underlying condition. With time, the tinnitus may become less of a problem as you adjust to it. In addition, the following often help.

Alternative sounds

If possible, avoid being in quiet or silent rooms. You are more likely to focus on the tinnitus and be distressed by it if there is nothing else to listen to. Other more pleasant sounds can be distracting and help to make the tinnitus less noticeable. This is sometimes called 'sound therapy'. For example, listen to the radio, TV, or stereo. Perhaps leave a window open so outside sounds are more evident. Some people wear a sound generator. This looks similar to a hearing aid but makes a pleasant sound which helps to mask the unpleasant tinnitus noise. Some people buy special CDs or tapes which play pleasant sounds.

Bedtime

Tinnitus is often most noticeable when you are quiet and trying to get off to sleep. If you play a radio or stereo it can help to mask the tinnitus noise until you drop off to sleep. (One with a timer is best so it switches itself off when you are asleep.) Some people connect a radio or stereo to special 'pillow speakers' which go under the pillow. This enables you to listen to the music or radio without anyone else being disturbed. Some specially designed pillows have speakers actually inside the pillow itself which you connect to your radio or stereo.

(If you find getting off to sleep a problem, see also the leaflet called 'Insomnia' which gives general tips on helping to sleep well.)

Hearing aids

If you have any deafness, even just a slight hearing loss, a hearing aid may help. The aid boosts normal sounds which you may not otherwise hear. These may override the tinnitus noise.

Stress anxiety and depression

Some people become anxious or stressed by tinnitus. This can make things worse. You may benefit from learning ways to relax and to combat stress. There are other leaflets in this series which offer advice on easing stress and anxiety. If you become particularly anxious or become depressed it is best to see a doctor for advice on treatment.

Tinnitus clinics

Some ear departments have specialist tinnitus clinics which offer such things as counselling, advice on 'sound therapy', relaxation techniques, and other advice on ways to cope with living with tinnitus.

For example, in severe cases a treatment called tinnitus retraining therapy (TRT) may be used. Some studies show that this can help in up to 3 in 4 cases. TRT aims to help the brain learn to ignore the tinnitus. (The tinnitus is not stopped, but the aim is to become less bothered by it). TRT involves wearing a sound generator (described above). This therapy is accompanied by regular counselling sessions which aim to help you cope with the tinnitus. TRT can take as long as a year where you gradually learn not to focus on your tinnitus until it becomes much less bothersome, even without using the sound generator.

Patient support groups (listed below) are also a great source of advice.

Further help and information

The British Tinnitus Association

Ground Floor, Unit 5, Acorn Business Park, Woodseats Close, Sheffield, S8 0TB
Tel (Freephone): 0800 018 0527 Web: www.tinnitus.org.uk

A national charity. It supports local self-help groups as well as assisting research. Its quarterly journal, Quiet, gives advice on the relief of tinnitus and publishes research.

RNID Tinnitus Helpline

19-23 Featherstone Street, London, EC1Y 8SL

Helpline: 0808 808 6666 (voice) 0808 808 0007 (text) Web: www.rnid.org.uk

A national helpline offering information and advice about tinnitus. Includes advice on where to obtain equipment used to help combat tinnitus such as noise generators.

References

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- [Berry JA, Gold SL, Frederick EA, et al](#); Patient-based outcomes in patients with primary tinnitus undergoing tinnitus retraining therapy. Arch Otolaryngol Head Neck Surg. 2002 Oct;128(10):1153-7. [abstract]
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Comprehensive patient resources are available at www.patient.co.uk

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