



TINNITUS (Ringing in the Ears)

What Is Tinnitus

Tinnitus is not an imaginary or mental disorder. Patients can have difficulty focusing, hearing, relaxing or sleeping. In severe cases, it can be extremely stressful and result in depression and reduced social and job options.

Over 15% of people have tinnitus. Tinnitus is the perception of sound, or “ringing,” in the ears when there is no actual external sound present. Some hear it as beeping, blowing, crickets, pulsing, humming, clicking or buzzing. Tinnitus can be intermittent, constant, loud or soft.

Causes of Tinnitus

Many think that tinnitus causes disease. However, tinnitus is actually a symptom to alert us to an underlying problem. 80% of tinnitus is actually due to hearing loss, of which age-related and noise-induced hearing loss are the leading causes. Other causes can be outer or middle ear infection and ear wax impaction, sinus disease and allergic rhinitis, middle ear bone disorders, ear tumors, Meniere’s disease, or vascular disorders. Certain medications, head, neck or traumatic brain injuries, anaemia, thyroid, autoimmune disease, hypertension and psychiatric disorders can also cause or increase tinnitus.

Hypersensitivity to Sounds

Hypersensitivity to sounds is not tinnitus. Hypersensitivity can be due to specific problems like recruitment in age-related hearing loss or reduced tolerance to loud or certain frequencies of sounds. Occasionally, it is associated with autism. Some people also dislike or fear certain specific sounds (eg, they may hate the sound of someone sniffing).

Treatment Of Tinnitus At Our Centre

While no cure is currently available, it can be successfully managed, allowing sufferers to no longer hear or be bothered by the tinnitus. The aim is to lower the perceived presence and intensity of tinnitus. Many OTC drugs and herbs promise miracle cures, but their effectiveness is not scientific evidence-based. Treatment will be tailored to holistically target emotional, cognitive and attentional aspects.

1. **Investigation** - After a thorough history and examination, various types of formal and specialised hearing tests may be needed. Further evaluation is also done with questionnaires and scoring of severity indices. Certain blood tests, CT or MRI scans may be required. Non-ear related, treatable or more urgent causes due to heart or brain pathologies first need to be excluded.
2. In acute stages, **drug therapy** may be needed (antianxiety and antidepressant drugs).
3. A **tinnitus education programme** and **counselling** is key. Understanding how best to manage one's tinnitus without excessive medications is most important.
4. **Behavioural therapy** is crucial as severe tinnitus is usually defined by how stressful it is to the patient, and not by its loudness or pitch. Eg cognitive behavioural therapy, mindfulness-based stress reduction and tinnitus retraining therapy.
5. A type of **tinnitus retraining therapy** uses sound tuned to a patient's hearing loss frequency to alter a patient's perception of, or reaction to, tinnitus. White noise, natural sounds or relaxing music can be programmed for relaxation and habituating the brain to not hear the tinnitus.
6. Suitable **hearing aids and cochlear implants** are very effective if the cause of tinnitus is hearing loss. With a hearing aid, one can focus better on hearing actual outside environmental sounds instead of the tinnitus. Certain hearing aids now have tinnitus masking capabilities too. Sound masker or therapy devices mask, distract from, habituate or neuro-modulate the cause of tinnitus.
7. **Experimental research** trials include repetitive transcranial magnetic or direct current stimulation, deep brain and vagus nerve stimulation.