Hearing problems - hyperacusis

Summary
- Hyperacusis is a type of reduced tolerance to sound.
- People with hyperacusis often find ordinary noises too loud, while loud noises can cause discomfort and pain.
- The most common known causes of hyperacusis are exposure to loud noise, and ageing.
- There are no tests for diagnosing hyperacusis.
- There is usually no cure for hyperacusis, although it can be managed.
- Treatment focuses on insight, reassurance and protection of the ears.

Hyperacusis is a type of reduced tolerance to sound. People with hyperacusis often find ordinary noises too loud, and loud noises uncomfortable or painful. The most common cause of hyperacusis is damage to the inner ear from ageing or exposure to loud noise.

Hyperacusis is often associated with tinnitus (buzzing, ringing or whistling noises in the ears) and distortion of sounds. Usually both ears are affected, although it is possible to have it in only one ear. Other types of reduced tolerance to sound include ‘loudness recruitment’ and ‘phonophobia’.

Symptoms of hyperacusis
The onset of hyperacusis can be gradual or sudden. Symptoms include:
- very quiet sounds are comfortable, but ordinary sounds (like voices at conversational volume) are too loud or distorted
- your own voice seems too loud or distorted
- low intensity sounds, such as the noise of a refrigerator, seem too loud
- sudden, loud noise can cause discomfort and pain
- loud noises can:
  - worsen your sensitivity to sound for some time
  - worsen tinnitus and distortion
  - cause a ‘popping’ sensation inside the ear.

Causes of hyperacusis
Some known causes of hyperacusis include:
- changes in hearing due to ageing
- one-off exposure to loud noise, such as an explosion
- a slap on the ear
- chronic exposure to noise, such as working in a noisy environment
- certain medications
- head injury
- surgery to the ear
- paralysis of the facial nerve – which can cause the mechanism in the middle ear that protects you from loud noise not to function
- medical procedures – clearing a blocked ear canal may cause temporary increased sensitivity to sound.

If you have intolerance to sound in one ear only, this should be investigated for an acoustic neuroma (a tumour) on the balance (vestibular) nerve. A tumour is more easily removed if it is detected early. However, even if a tumour is
found, not all cases require removal.

**Diagnosis of hyperacusis**

There are no tests for diagnosing decreased sound tolerance. Diagnosis depends mainly on your description of your discomfort. Audiological tests are used to assess the health of your ear.

**Impact of hyperacusis**

If your hyperacusis is severe, you may find that you are uncomfortable leaving your home, and that your reduced tolerance for sound is affecting your career and social life. Some people find that everyday activities, such as driving a car, using a lawn mower, vacuum cleaner or power tool, watching the television or listening to music are problematic. Shopping centres, restaurants and movie theatres may be too loud.

The good news is, in most cases, hyperacusis can be managed

**Treatment for hyperacusis**

There is usually no cure once noise sensitivity has started, because the common causes are noise damage and ageing damage to the inner ear. Avoiding exposure to noise will help.

Other disorders of the inner ear, which may be mistaken for hyperacusis, are treatable, so prompt assessment of the ears is important.

Generally, sound sensitivity is managed in a number of ways, including:

- **wearing hearing protection in noisy environments**, such as when working with power tools or being around loud music. This is because tinnitus and sensitivity may be exacerbated by excessive sounds. It is not necessary to wear hearing protection for everyday activities
- **reintroducing everyday sounds as soon as possible** – this is known as desensitisation
- **asking people to avoid raising their voice** when they speak to you. Let them know it irritates your ears and distorts the message
- **talking to someone about your symptoms** if anxiety or other reactions persist. A counsellor or psychologist may be able to talk with you and help you to identify factors that may be influencing your reactions to loud sounds, and help you develop coping strategies. Knowing and remembering that hyperacusis is not caused by a threatening disorder can help your tolerance significantly
- **tinnitus retraining therapy (TRT)** – this involves wearing special hearing aids called ‘noise generators’, which can, over time, reduce your sensitivity to noise. The ears become accustomed to the barely audible ‘white noise’ and eventually ignore it
- **medication to help you sleep** – this may be needed in the short term.

**Where to get help**

- Your **GP (doctor)**
- **Ear, nose and throat specialist** (your doctor can refer you)
- **Audiologist** (hearing scientist)
- **Tinnitus Association of Victoria** Tel. (03) 9510 1577
- **Expression Australia** (formerly Vicdeaf) Tel. (03) 9473 1111, TTY: (03) 9473 1199, toll free for country callers Tel. 1300 780 225, TTY 1300 780 235
- **The Royal Victorian Eye and Ear Hospital** Tel. (03) 9929 8666
- **Meniere’s Australia** Tel. 1300 368 818