

## Tinnitus or “Ringing in ears”

### WARNING

**If you are experiencing a combination of vertigo, sudden hearing loss and ringing ears, we urgently recommend that you contact your primary care provider’s team or go to the nearest Emergency Department.**

### What is a “tinnitus”?

When you experience a tinnitus, you hear a sound coming out from one or both ears in the absence of an external source. It can be a ringing, buzzing, hissing or roaring sound.

Your ear is divided in 3 sections: the external ear, the middle ear and the inner ear. Tinnitus is often caused by damage to cells in a part of the inner ear. When they are damaged, they send signals to the brain that makes you think you are hearing things that are not really there.

The damage that leads to tinnitus can be caused by (but not limited to):

- Normal aging and hearing loss
- Long term exposure to loud noise
- Some medications
- Head and neck injuries

Your healthcare provider can help explain you in further detail what maybe the cause in your particular case.

### What to do ?

You need to be evaluated by your health care provider. A hearing test (audiogram) will likely be included in the assessment. Once you are found to have a tinnitus not caused by another underlying medical condition, listed below are possible treatments and techniques that will address your reaction to the tinnitus itself and make it easier to live with (1).

Hearing aids:

People whose tinnitus is related to hearing loss are often less bothered by if they get a hearing aid. Hearing aids make outside sounds clearer and louder which helps make the tinnitus less noticeable.

#### Tinnitus retraining therapy:

With a tinnitus expert, you retrain your brain to view the ringing in your ears as normal background sound rather than annoying distractions. These therapies are performed at specialized tinnitus centers and in some audiologic practices.

#### Sound treatment program:

Listening to a “Sound Program” can be used to help you with your tinnitus. The sound may completely block the tinnitus, partially or not all. When used properly, the quality and intensity of the tinnitus may become more acceptable to you (2,3)

- Nature sounds;
- Home appliances;
- “White Noise Machines” : These are sound devices that produce a soft sound that helps mask tinnitus
- Talk radio
- Music

#### Cognitive behavioral therapy:

Cognitive behavioral therapy involves talking with a psychologist or counsellor to develop methods of coping with tinnitus and distracting yourself.

#### Avoid loud noise:

Loud noise exposure is a common cause of tinnitus. In addition, it increases the risk of hearing loss and can worsen your tinnitus.

#### Optimize your lifestyle:

Your lifestyle can affect the intensity of your tinnitus. This includes getting enough rest, managing stress and exercising. Use of caffeine, nicotine alcohol, excessive sugar or salt, or aspirin can exacerbate your tinnitus (3).

#### Re-contact your health care provider if you need more assistance or experience

- sudden hearing loss
- neurological symptoms
- other concerns

## References

1. Matthieu J. G., "Telemedicine in Tinnitus: Feasibility, Advantages, Limitations, and Perspectives", International Scholarly Research Notices, vol. 2013, Article ID 218265, 7 pages, 2013
2. The Ottawa Hospital, October 19<sup>th</sup> 2018, consulted 11/03/ 2019, <https://www.ottawahospital.on.ca/en/clinical-services/deptpgrmcs/departments/audiology/tinnitus/>
3. American Tinnitus Association, consulted 07/05/2019, <https://www.ata.org/managing-your-tinnitus/treatment-options>