Part 3

The Challenge of Tinnitus

By

Mark McGee

> Tinnitus (pronounced tih-NITE-us or TIN-uh-tus) is the perception of sound that does not have an external source, so other people cannot hear it.
>
> Tinnitus is commonly described as a ringing sound, but some people hear other types of sounds, such as roaring or buzzing. Tinnitus is common, with surveys estimating that 10 to 25% of adults have it. Children can also have tinnitus. For children and adults, tinnitus may improve or even go away over time, but in some cases, it worsens with time. When tinnitus lasts for three months or longer, it is considered chronic. National Institute on Deafness and Other Communication Disorders

According to the Mayo Clinic —

> A Meniere's disease diagnosis needs to include:

- Two or more vertigo attacks, each lasting 20 minutes to 12 hours, or up to 24 hours.
- Hearing loss proved by a hearing test.
- Tinnitus or a feeling of fullness or pressure in the ear.

Most people I know who have a diagnosis of Ménière's have 'tinnitus' and 'fullness or pressure in the ear,' though that may not be your experience. What I'm going to share in this article addresses the issue of 'tinnitus.' I'll address 'ear fullness' in a future newsletter.

Tinnitus Facts

Tinnitus is fairly common ‘with surveys estimating that 10 to 25% of adults have it’ (NIDOCD). People with Ménière’s in the U.S. make up only 0.2% of the population, so that means the vast majority of people with tinnitus do not have a diagnosis of Ménière’s.

David M. Kaylie, MS, MD (Otolaryngology, Neurotology, Ear and Hearing Problems, Acoustic Neuromas) is a Professor of Otolaryngology, Head and Neck Surgery at Duke University Medical Center. He says there are two main types of tinnitus —

Non-pulsatile (subjective) tinnitus is caused by abnormal activity in the auditory cortex of the brain responsible for processing sound. People with non-pulsatile tinnitus experience different noises, including sounds, tones, or static, that can change in pitch or quality. It's often a result of the brain trying to fill in missing sensory information—similar to how someone with an amputated foot might claim they can still feel it because the brain is generating that sensation.

Pulsatile (objective) tinnitus is vascular in nature and usually involves noise from the blood vessels near the ear. People with pulsatile tinnitus hear their heartbeat or pulse in the ear. Pulsatile tinnitus is often caused by either abnormal blood vessels or abnormal vasculature issues such as tumors. It is much less common than non-pulsatile tinnitus. MSD Manual

The Mayo Clinic reports that most people who have tinnitus have subjective tinnitus, or tinnitus only the person with tinnitus can hear. That is my experience and that of other people I know who have tinnitus. Tinnitus can vary in pitch and volume. When my tinnitus began almost 20 years ago it was a medium pitch tone with low volume in one ear. My other ear started up with a similar pitch tone and low volume about a year later. Though the pitch tones have not changed much through the years, the volume has. Though some people say their tinnitus comes and goes, mine is consistent. It never goes away and has gotten louder through the years. I've heard the same report from many people with Ménière's. My tinnitus also gets louder as storms approach, super loud during storms, then 'usually' returns to the normal volume after storms leave the area. However, if storms come in clusters (as they often do) the tinnitus remains high until all the storms have passed. The feeling of 'fulness' in the ears is also part of that. It can last for several days leading up to, during, and after storms move through the area. I've heard from other people with Ménière's who have similar experiences with tinnitus.

Harvard Medical School scientists say they’re finding evidence that may point to some people with tinnitus having ‘hidden’ hearing loss caused by damage to the auditory nerve.

> Researchers first discovered the phenomenon in lab mice in 2009. "From there, it wasn't difficult to add two and two by suggesting that the loss of these nerve fibers in people with normal hearing tests could be associated with tinnitus," says Stéphane Maison, a tinnitus researcher and associate professor of Otolaryngology–Head and Neck Surgery at Harvard Medical School.

> Subsequent studies began making the connection. The latest — believed to be the largest and most nuanced to date — was published Nov. 30, 2023, in Scientific Reports. Maison and his colleagues at Harvard-affiliated Massachusetts Eye and Ear recruited almost 300 people (ages 18 to 72) with normal hearing tests who had chronic tinnitus, no tinnitus, or intermittent tinnitus. Harvard Medical School

Other Reasons for Tinnitus

Other reasons given for having tinnitus include —

- Age-related hearing loss (presbycusis)
- Exposure to loud noise
- Blockages in the ear canal
- Injury to the head or neck
- Temporomandibular Joint Disorder (TMJ)
- Sinus congestion
- Ear infection
- Rapid changes in air or water pressure
- Traumatic brain injury
- Side effect of some prescription medications
- Metabolic disorders
- Autoimmune disorders
- Blood vessel disorders
- Psychiatric disorders
- Vestibular disorders (e.g. Ménière's Disease)
- Tumor-related disorders

Cures for Tinnitus?

This leads to the question, can tinnitus be ‘cured?’ According to the American Tinnitus Association the answer is ‘no’ —

> There is currently no scientifically validated cure for most types of tinnitus. If clinicians can find an underlying cause, such as high blood pressure or temporomandibular joint dysfunction, they may be able to treat that problem – which, in turn, may reduce or eliminate the tinnitus. There are, however, treatment options that can ease the perceived burden of tinnitus, allowing patients to live more comfortable, productive lives. The ATA is leading the charge in the ongoing search for definitive cures for tinnitus and better treatments. American Tinnitus Association

So, what can you do if you have tinnitus that doesn't go away? The Cleveland Clinic has some suggestions —

If you have ringing in your ears, try to avoid:

- Total silence (this can make symptoms worse because the ringing is more noticeable).
- Exposure to loud noises.
- Common tinnitus triggers like poor sleep quality and extreme stress.

Some experts believe that nutrition plays a role in whether people experience tinnitus. There's limited research about this topic, but recent studies suggest that these foods and beverages may increase your risk for tinnitus:

- Caffeine.
- Salt.
- Saturated fats.

Here are some suggestions from NHS.uk —

> If you have tinnitus there are things you can do to help cope.

Do

- try to relax – deep breathing or yoga may help
- try to find ways to improve your sleep, such as sticking to a bedtime routine or cutting down on caffeine
- try to avoid things that can make tinnitus worse, such as stress or loud background noises
- join a support group – talking to other people with tinnitus may help you cope

Don't

- do not have total silence – listening to soft music or sounds (called sound therapy) may distract you from the tinnitus
- do not focus on it, as this can make it worse – hobbies and activities may take your mind off it

Research and Prayer

Tinnitus is a problem for tens of millions of people in the U.S. If you have Ménière's disease, you are a small portion of those people but that doesn't make having tinnitus any easier to face every day. Concerns about tinnitus are one of the top discussions on Ménière's forums I've read online.

Talk with your doctor(s) about things you can do to deal with chronic tinnitus. Also, do your own research. New information becomes available as scientists continue to look for ways to help sufferers.

I did find that acupuncture helped lower the volume of my tinnitus 'temporarily.' I tried acupuncture for vertigo several years ago. While the weekly treatment didn't help my vertigo, I did notice that my tinnitus was not as loud. Unfortunately, acupuncture for vertigo or tinnitus is not covered by insurance. I was not able to continue the treatments and the tinnitus returned to its previous volume, then increased in volume over time.

Another area of research that ‘may’ hold some promise for tinnitus sufferers is in the area of ‘neuromodulation. A large randomized trial demonstrated the possibility that different ‘bimodal neuromodulation settings’ might reduce tinnitus symptoms. As a journalist I begin by being both curious and skeptical. The medical community is responding by developing devices to stimulate various areas of the brain in hopes it might help the millions of Americans suffering from tinnitus. We’ll watch and see how these devices work in the coming months.

I’ll pray for you and ask that you pray for me. Ménière's is a tough disease to handle. Tinnitus is just one part of the ongoing challenge. We’ll look at some of the other challenges Ménière's gives us in the next Ménière's Years newsletter.

"… rejoicing in hope, patient in tribulation, continuing steadfastly in prayer." Romans 12:12

Here's to hope!

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