

10 Congress St., Suite 103 Pasadena, CA 91105 P: (626) 796-6164 F: (626) 796-0883 www.huntingtonent.net

Steven A. Battaglia M.D. Jordan M. Sukys M.D. Paul J. Fruhner PA-C Stephanie A. Schwartz, PA-C

# **Tinnitus**

## What is tinnitus?

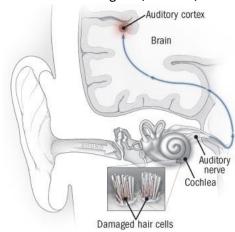
- Tinnitus is the word for any noise that is perceived by someone without an external source. It's a noise that only you can hear
- Whether or not this noise is "real" does not matter. It is real for the person experiencing it

### What does tinnitus sound like?

- The most common forms of tinnitus sound like a high pitch whine, white noise, static, buzzing or whirring. We think of these types as being related to wear and tear on the inside of the ear.
- This can be perceived in one or both ears. The sound often fluctuates in severity, being most pronounced in quiet settings (e.g. when going to sleep) vs activities where one is engaged and distracted
- There are other, less common, forms of tinnitus that are distinct, such as the sound of a heartbeat in one's ear or a clicking noise. These have more distinct anatomic origins, related to perceived blood flow, or muscle spasms, respectively.

### What causes tinnitus?

In most cases, tinnitus is caused by age-related wear and tear on the inside of the ear. In some people this causes hearing loss, tinnitus, or both.



- To be specific, we suspect that age-related dysfunction to the hair cells of the cochlea lead to both hearing loss and disruptions in the auditory processing pathway of the brain, which manifests as tinnitus
- Despite decades of research, we still cannot say with absolute certainty that this is the cause of most forms of tinnitus, but it is our best estimation
- As mentioned earlier, tinnitus that sounds like a heartbeat in the ear is caused by perception of blood flow from somewhere nearby, and clicking tinnitus is due to spasms of tiny muscles behind the ear drums or of the soft palate in the back of your mouth

## Is testing required when I have tinnitus?

- Hearing tests (audiograms) are often performed to determine if the tinnitus is related to hearing loss
- Imaging studies may be ordered if the tinnitus is only on one side, and is frequently ordered if the tinnitus sounds like a heartbeat sound, as this can be caused by tumors or vascular malformations that would show up on a CT scan or MRI

### How can I treat my tinnitus?

- Despite decades of research, no reliable treatment has been developed to make the sound "go away"
- The mainstay of treatment is to focus on reducing the negative impact tinnitus has on one's life
- Treatments to help reduce the negative impact of tinnitus include:

## White noise masking strategies

- Playing a broad band noise like a fan, white noise machine, air conditioner etc. can help distract your ear and reduce the intensity of/disruption from tinnitus during quiet times like when trying to fall asleep
- These broad band noises have multiple frequencies and are particularly well suited to distracting the ear, unlike radio or TV
- The volume should not be loud. The goal is not to drown out the tinnitus, but merely to distract the ear
- In addition to stand-alone white noise machines available on Amazon such as the EVO LectroFan, there are many free white noise apps available through the Apple App Store or Google Play Store (just search "white noise" in these stores)
- White noise can come in many varieties, including "brown" or "pink" noise, as well as other soothing sounds like rain drops, waves, or train rumbling, etc. Many patients can find a sound that works particularly well with their tinnitus

### **Tinnitus Maskers**

- Tinnitus maskers are like noise-cancelling headphones for tinnitus. They can be present as standalone devices, or included as an additional feature in a hearing aid.
- Tinnitus maskers tend to be expensive, so we tend to recommend them only as part of a hearing aid if your tinnitus is accompanied by significant hearing loss

### Medications/Supplements

- Vitamin complexes such as OTC Lipoflavanoids (vitamin B complex), despite promises on the label, have not been proven to reliably help reduce tinnitus symptoms
- However, they tend not to cause any harm, so we do not discourage use if the patient would like to try them

### **Tinnitus Retraining Therapy**

- For relentless/persistent, the next step to consider is working with a therapist on re-training how we react to tinnitus. While we cannot make the sound go away, we can change how we let this noise affect us.
- These treatments, unfortunately, are often not covered by insurance, but thankfully, are rarely required by patients. We recommend finding a provider near you via internet search or through your insurance provider (if applicable)

### Time

- o More often than not, the severity of tinnitus reduces with time
- Symptoms can become worse temporarily with factors like stress/anxiety, sleep deprivation, caffeine, alcohol, jaw clenching, cervical tension etc., but over time they do become less and less severe, usually to the point where patients are no longer bothered enough to seek treatment

For further information, visit the American Tinnitus Association website www.ata.org