



## Top Ten PULSATILE Tinnitus Tips For Doctors

People with pulsatile -or pulse-synchronous- tinnitus hear a sound that is in sync with their heartbeat or pulse. Most commonly described as a “whooshing,” the sound can be heard on one or both sides. It is a symptom of an underlying disorder, rather than a disease unto itself. Unlike the more common form of constant tinnitus, in which a constant “ringing in the ears” tone is perceived, the underlying cause of pulsatile tinnitus may often be identified and treated. Pulsatile tinnitus is typically related to some kind of vascular process, rather than an implication of the ear apparatus itself.

Pulsatile tinnitus may sound like a whooshing, swooshing, screeching, creaking, clicking or other rhythmic sound. The key that distinguishes the sound from “regular” tinnitus is that it is a pulsing sound that is in sync with the heart rate. Some describe it as a low pitch sound, like the sound of someone marching in the snow, and others describe a much higher, screeching sound, like the sound that birds sometimes make. Low or high, it is pulsatile tinnitus if it is in sync with the pulse. Pulsatile tinnitus, unlike constant tinnitus, is only rarely described as “ringing in the ears.”

The differential diagnosis of pulsatile tinnitus is very different from its nonpulsatile counterpart, and its work-up is different as well. It is often possible to diagnose and remedy the underlying cause of pulsatile tinnitus. More than half of people with pulsatile tinnitus have an identifiable cause; it may be the sole symptom of a potentially dangerous condition. Pulsatile tinnitus warrants a thorough medical evaluation to look for known, identifiable and treatable causes, and to exclude the possibility of a worrisome problem. For these reasons, it is especially important for doctors to know how to recognize a patient who is experiencing pulsatile tinnitus, and to adequately distinguish and evaluate the patient’s symptoms, while also acknowledging the effects that such a symptom may have on a patient’s quality of life.

This list provides helpful information for doctors to support a patient experiencing pulsatile tinnitus. We encourage patients who think they may be experiencing pulsatile tinnitus to review this information sheet with their doctors.

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1. PULSATILE TINNITUS, DEFINED AS TINNITUS SYNCHRONOUS WITH THE HEARTBEAT, IS LESS COMMON THAN THE CONSTANT SOUND FORM OF TINNITUS. IT IS USUALLY A SYMPTOM OF AN UNDERLYING PULSATILE PROCESS, TYPICALLY VASCULAR IN NATURE, RATHER THAN A PROBLEM WITH THE EAR APPARATUS ITSELF.
2. PULSATILE TINNITUS IS A SYMPTOM THAT AFFECTS MEN AND WOMEN OF ALL AGES AND SIZES.
3. PULSATILE TINNITUS MAY MANIFEST AS DIFFERENT SOUNDS FOR DIFFERENT PEOPLE, BUT IT RARELY IS A "RINGING IN THE EARS," AS REGULAR TINNITUS IS OFTEN DESCRIBED.
4. PULSATILE TINNITUS MAY BE SUBJECTIVE (HEARD ONLY BY THE PATIENT) OR OBJECTIVE (HEARD BY THE PATIENT AND OTHERS).
5. A GENERAL PRACTITIONER SHOULD TRY TO LISTEN FOR A BRUIT (THE WHOOSHING SOUND) WITH THE BELL OF THE STETHOSCOPE AT THE ANGLE OF THE JAW, OVER THE MASTOID BONE, AND AROUND THE EAR, PREFERABLY IN A SOUNDPROOF OR VERY QUIET ROOM, TO DETERMINE WHETHER THE PATIENT'S PULSATILE TINNITUS IS OBJECTIVE OR SUBJECTIVE.
6. POSSIBLE CAUSES OF PULSATILE TINNITUS INCLUDE ARTERIAL NARROWING/OCCCLUSION, TORTUOSITY OR LOOPING OF THE CAROTID OR VERTEBRAL ARTERY, ANEURYSM, ARTERIOVENOUS FISTULA OR MALFORMATION, VENOUS OCCLUSIVE DISEASE, MIDDLE EAR TUMORS, AND ELEVATED INTRACRANIAL PRESSURE, AMONG OTHERS. MANY OF THESE ARE POTENTIALLY DANGEROUS CONDITIONS. A PATIENT EXPERIENCING PULSATILE TINNITUS SHOULD UNDERGO A THOROUGH MEDICAL EVALUATION, AND MAY REQUIRE CONSULTATIONS BY A VARIETY OF SPECIALISTS, DEPENDING ON SPECIFIC SYMPTOMS.
7. THERE IS NO SINGLE BEST DIAGNOSTIC MODALITY THAT CAN ESTABLISH A CAUSE OF PULSATILE TINNITUS, AND MANY PATIENTS MAY UNDERGO MULTIPLE TESTS. SOME TESTS TO EVALUATE THE CIRCULATION INCLUDE CT ANGIOGRAPHY, MR ANGIOGRAPHY AND DUPLEX ULTRASOUND. THESE IMAGING MODALITIES MAY VISUALIZE THE ARTERIES AND VEINS.
8. IT IS NOT COMMON FOR PULSATILE TINNITUS TO GO AWAY ON ITS OWN.
9. MANY PATIENTS HAVE DIFFICULTY ENDURING PULSATILE TINNITUS, WHICH OFTEN LEADS TO INSOMNIA, LOSS OF CONCENTRATION, AND PROFOUND ANXIETY. HEARING AIDS OR MASKING DEVICES, AMONG OTHER METHODS, MAY BE USED AS COPING TOOLS, BUT NOT AS "CURES."
10. PULSATILE TINNITUS HAS MANY PSEUDONYMS (E.G. PULSE-SYNCHRONOUS TINNITUS; VASCULAR TINNITUS; BRUIT; MACHINERY MURMUR, ETC.). INCLUDE THESE TERMS IN YOUR SEARCH WHEN REVIEWING MEDICAL REPORTS.

## ADDITIONAL INFORMATION AND SUPPORT FOR PULSATILE TINNITUS PATIENTS AND THEIR DOCTORS

Whooshers.com is an information and support site for people who experience pulsatile tinnitus. Provided are links to medical reports, along with personal accounts from real "Whooshers" that describe pulsatile tinnitus experiences, diagnoses, and, in a growing number of cases, treatments. Patients should review the information and links to medical reports with their doctors; doctors are encouraged to compare the details in medical reports to the symptoms presented by their patients. Pulsatile tinnitus is a symptom to be taken seriously by medical professionals familiar with the long list of possible underlying causes; self-diagnosis by patients is, as always, strongly discouraged.