Tinnitus

Tinnitus is a perceived sound in a person's ears that only they can hear, without an identifiable external source. The noise can be intermittent or continuous. Tinnitus is common and occurs in 10% of people.

There are two types of tinnitus:

- Pulsatile tinnitus: sound occurring with the person's heartbeat; usually from a problem in the blood vessel system
- Nonpulsatile tinnitus: most common type, often described as ringing, buzzing, or clicking

If no findings are seen on a physical examination of a person's ears, then the doctor may order imaging tests.

If pulsitile tinnitus is suspected, a CT angiography (CTA) (https://www.radiologyinfo.org/en/info/angioct) of the head, CTA of the head and neck, or CT of the temporal bone without intravenous (IV) contrast is usually appropriate. MRI or MR angiogram (https://www.radiologyinfo.org/en/info/angiomr) of the head, with and without IV contrast, is also usually appropriate. MR angiogram of the head without IV contrast, MR venography with and without IV contrast, arteriography of the head and neck, ultrasound of the carotid arteries, or CT (https://www.radiologyinfo.org/en/info/headct) of the temporal bone with IV contrast may be appropriate.

If nonpulsatile tinnitus is suspected, and only in one ear, MRI of the head (https://www.radiologyinfo.org/en/info/mri-brain) and ear canals with and without IV contrast is usually appropriate. MRI of the head without IV contrast, or CT of the temporal bone with or without IV contrast, or CTA of the head with IV contrast may be appropriate.

If the individual has nonpulsatile tinnitus in both ears, imaging tests are not usually appropriate. If there is hearing loss or head trauma associated with the tinnitus, following Appropriateness Criteria for those conditions is recommended.

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