

# Medication & Hearing Loss: What You Need To Know About Ototoxicity

Certain medications can damage the ear, resulting in hearing loss, tinnitus and vestibular/balance disorders. These drugs are considered ototoxic.

## Facts & Stats

- Tinnitus is often one of the first symptoms of damage. It may be described as ringing, roaring, clicking, hissing, or buzzing<sup>1</sup>
- Hearing loss can range from mild to profound, temporary to permanent, depending on the severity of damage to the hair cells in the cochlea<sup>1</sup>
- Drugs known to cause temporary damage include salicylate pain relievers, quinine, and loop diuretics<sup>2</sup>
- 10% of people taking aminoglycoside antibiotics experience ototoxicity, although up to 33% has also been reported in adult patients, with a 3% chance of that damage being permanent<sup>3</sup>
- For patients being treated with the chemotherapy agent cisplatin, ototoxicity may occur in as many as 50% of patients<sup>4</sup>
- Approximately 60% of children receiving platinum-based chemotherapy experience hearing loss<sup>2</sup>
- Patients with a family history of ototoxicity are at a greater risk for hearing loss when treated with ototoxic drugs<sup>7</sup>

## What You Can Do To Help

Before starting treatment, a baseline record of your patient's hearing should be recorded. Hearing healthcare professionals can perform tests that evaluate hearing in very high frequencies, such as 12,000 to 20,000Hz, possibly allowing for earlier detection of ototoxic effects.<sup>1</sup> During the course of treatment, your patient should also have periodic hearing tests as part of the monitoring process. This information can help you make the decision to stop or change the drug therapy or dosage before your patient's hearing is permanently damaged.<sup>2</sup> This will also allow the patient to report any hearing changes, tinnitus, or dizziness/imbalance.

For cases in which the drugs cannot be stopped or changed, we can help your patient take steps to manage the effects of the hearing loss and/or tinnitus by initiating a rehabilitation plan. This can include counselling, hearing aids, assistive listening devices, and communication management.<sup>5</sup>

Audiological management is an integral part of a holistic therapeutic treatment plan; improving quality of life both during and after treatment.<sup>6</sup>

# References

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