

# The Villages Health®

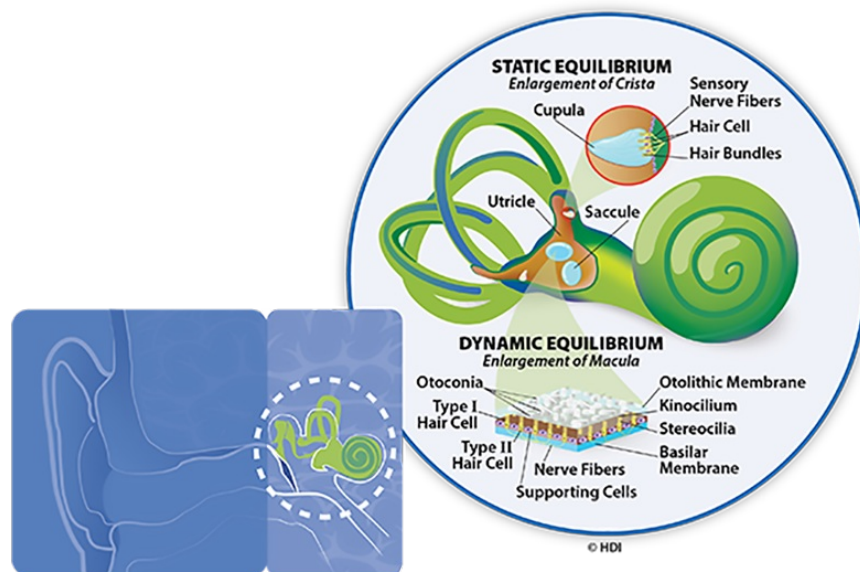
AUDIOLOGY PATIENT NEWSLETTER  
April 2023



## Ototoxicity Detection, Baseline Knowledge

*Ototoxicity* is a big word which most are unfamiliar with. More simply stated, it is **medicine-induced hearing loss** which, although common, is rarely discussed and seldom explained. The term derives from “*oto*,” referring to the ear and “*toxic*,” meaning poisonous. From at home drug cabinets to life-saving protocols, many types of therapeutic agents are ototoxic.

*Did You Know?* An estimated 100 classes of drugs frequently used to treat pain and infections, along with cancer, heart or kidney disease, can damage the inner ear’s tiny cochlea and/or vestibular (balance) system.



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From pain relievers like aspirin, to NSAIDs such as ibuprofen, or antibiotics to loop diuretics and chemotherapy medications, exposure to potentially ototoxic medications can **damage inner ear sensory hair cells**, often permanently. As a result, individuals may experience hearing loss, tinnitus (ringing in the ears),

hyperacusis (acute sensitivity to sound) or dizziness. As drug company ad disclaimers constantly remind us, **side effects present risks**, so, in close consultation with trusted resources, we should make well-informed decisions about tradeoffs involved with prolonged use of daily doses.



Learning ototoxic factors are societally prevalent, you should hear the facts about *Signs & Signals*.

As necessary, experts suggest **proactively discussing** ototoxic concerns with your:

- Primary care doctor
- ENT doctor
- Physician's assistant
- Pharmacist
- Oncologist and of course, your..
- Hearing care professional

Many variables influence audiologic responses such as medication types, dosages and usage duration. With ototoxicity detection, sooner is better and notable symptoms, including hearing loss, ought to be promptly reported. For your benefit, timely discovery of harmful effects is carefully advised.

From a healthcare system perspective, Ototoxicity Management Protocols (OMP) aim to provide evidence-based guidelines for effective monitoring. As reputable research states:

*“Early detection and proactive management of hearing loss are the primary rationale for OMPs, recognising that hearing change is frequently overlooked by the impacted individual and, as a result, under-treated by health professionals, particularly for patients coping with a life-threatening disease.”<sup>1</sup>*

And further:

*“Beyond ototoxicity monitoring for the purpose of rehabilitation are considerations for informing drug treatment decisions. When ototoxicity is identified prospectively, the drug regimen can be altered to prevent*

*further damage from occurring if it is medically reasonable to do so.”<sup>2</sup>*

There is considerable research indicating cisplatin is highly ototoxic, a significant fact, with estimates that 19.3 million cancer cases will be identified each year by 2025, an increase from 14.1 million in 2012.<sup>2</sup>

<sup>1</sup> Durrant JD, Palmer CV, Lunner T. Analysis of counted behaviors in a single-subject design: modeling of hearing-aid intervention in hearing-impaired patients with Alzheimer's disease. *Int J Audiol.* 2005 Jan;44(1):31-8. doi: 10.1080/14992020400022637. PMID: 15796100.

<sup>2</sup> Konrad-Martin D, Poling GL, Garinis AC, Ortiz CE, Hopper J, O'Connell Bennett K, Dille MF. Applying U.S. national guidelines for ototoxicity monitoring in adult patients: perspectives on patient populations, service gaps, barriers and solutions. *Int J Audiol.* 2018 Sep;57(sup4):S3-S18. doi: 10.1080/14992027.2017.1398421. Epub 2017 Nov 20. Erratum in: *Int J Audiol.* 2018 Sep;57(sup4):S108. PMID: 29157038; PMCID: PMC6450095.

For those receiving chemotherapy, earlier referrals to hearing care professionals facilitates proactive identification of ototoxic hearing loss, evidence-based diagnostics, empathetic counseling and implementation of personalized hearing solutions. In fact, your healthcare team's coordination may reduce ototoxic risks and improve quality of life outcomes. Fortunately, some insurance policies cover essential exams, so we encourage closely reviewing your benefits.

Among other clinical facets, with your healthcare providers' sound advice, preventive Ototoxicity Monitoring should include:



- A baseline hearing test, prior to or coincident with taking new medicines
- Periodic testing, as properly prescribed
- Timely testing, when noteworthy symptoms arise

Healthy adherence to this regimen is vital, as ototoxic detriments often progress until belatedly recognizing hearing abilities, especially at higher frequencies, have rapidly deteriorated. Suffice it say, communication struggles may inhibit abilities to understand verbal care instructions which are in your best interest.

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*While we take your hearing care seriously, a little laughter goes a long way.*

**Good Humor, Healthy Hearing**





*Get a Baseline Exam,  
At Just the Right Time*

Beyond talking with your primary care doctor, oncologist or pharmacist, please see us and encourage loved ones to get periodic testing which accurately assess the type and degree of hearing loss. These personal consultations will provide key baseline information and useful dialogue on possible side effects of treatment-related medications. You should know, our kind words of wisdom will serve you well.

**VISIT OUR WEBSITE**

**LEARN MORE**

Schedule an appointment for you or your loved ones.  
**(352) 674-1799**



# The Villages Health®

## Audiology Department

*The information contained herein is provided for general educational purposes.  
Regarding specific questions, please talk to your Doctor.*

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