STUDY SHOWS

500,000

hearing loss cases each year are due to chemotherapy.

It's called OTOTOXICITY, and we can help with prevention and treatment.

What is ototoxicity?

Ototoxicity is damage to the inner ear as an adverse reaction to certain chemicals and medications. It can lead to hearing loss, tinnitus, and balance disorders.

How are chemotherapy and hearing loss linked?

Certain platinum-based chemotherapy drugs such as cisplatin and carboplatin are associated with permanent hearing loss.

Why refer to a hearing care professional?

Audiologists can evaluate, diagnose, and provide a treatment plan to address ototoxic hearing and balance problems. They can also work with patients on prevention strategies.

10 signs your patient may be experiencing ototoxicity

- ☐ Trouble hearing in one or both ears
- ☐ Ringing in the ears (tinnitus)
- ☐ Unsteadiness when walking
- ☐ Difficulty balancing while taking stairs
- ☐ Dizziness or lightheadedness
- ☐ Problems focusing in class (children)
- ☐ Blurry vision
- ☐ Trouble understanding speech
- ☐ Sense of spinning (vertigo)
- ☐ Tiredness or fatigue

FAST FACTS

Approximately 43% of people exposed to cisplatin or carboplatin experience hearing loss.

Reversal of ototoxic effects may be possible in some instances when an ototoxic drug is stopped.

Categories of ototoxicants beyond pharmaceuticals include solvents, asphyxiants, nitriles, and metals/compounds.

Some 200 to over 750 types of chemicals are suspected ototoxicants, making awareness critical.

Excess noise exposure can compound the effect of chemically induced hearing damage.

Common ototoxic medications also include loop diuretics, selected analgesics, and certain antibiotics.

ScienceDirect. *Cancer Epidemiology. Global Burden of Ototoxic Hearing Loss Associated With Platinum-Based Cancer Treatment: A Systematic Review and Meta-Analysis.* ***American Speech-Language-Hearing Association (ASHA).*** *Chemicals That Affect Hearing & Balance.* ***ASHA.*** *Ototoxic Medications (Medication Effects).* ***Government of Western Australia | Department of Mines, Industry Regulation, and Safety.*** *Ototoxic Chemicals — Chemicals That Result in Hearing Loss.* ***ScienceDirect.*** *Disease-a-Month. Chemical Exposure and Hearing Loss.* ***United States Department of Labor | Occupational Safety and Health Administration | Centers for Disease Control and Prevention | National Institute for Occupational Safety and Health.*** *Preventing Hearing Loss Caused by Chemical (Ototoxicity) and Noise Exposure. Access information available on request.*

Together, we can preserve and protect the community's hearing health and quality of life. For referrals or to learn more, please contact us today. 516.387.4000

Esther Fogel, *Au.D.*

Sarah Infante, *Au.D.*

261 Broadway
Lynbrook, NY 11563
516.387.4000
info@comprehensiveaudiology.com

COMPREHENSIVE
AUDIOLOGY
ESTHER FOGEL, AuD
ComprehensiveAudiology.com