Don’t Let Ototoxic Drugs Flip Your World Upside Down!

Neil G. Bauman, Ph.D.

The Center for Hearing Loss Help

www.hearinglosshelp.com
Drugs that can damage our ears are known as **Ototoxic Drugs**

**Ototoxicity is:**

“the property of being injurious to the ear”

--Stedman’s Medical Dictionary
A Scary Statistic:

“Of the top 200 prescription drugs used here in America in the year 2008, representing more than 2 billion prescriptions, 83% of them can be ototoxic.”
You Are the Guinea Pig!

“51% of the FDA approved drugs released in the past few years have had serious side effects that had not been detected at the time of their release to the public.”

Some of these are ototoxic side effects.
Lynn Brown

Wobblers Anonymous

http://www.wobblers.com
More Stories

- “Ruby” Gentamicin
- “Sally” Gentamicin
- “Bert” Doxycycline
- “Eunice” Amitriptline (Elavil)
- “Jonathan” Erythromycin (E-Mycin)
- “Peggy” Atenolol (Tenormin)
- “Sam” Tobramycin (Tobradex)
Don’t Let Ototoxic Drugs Break Your Hips!

“Drugs are often prescribed unnecessarily, especially in older adults.”
Dr. S. Wolfe, M.D.

“Each year 32,000 older adults suffer hip fractures, attributable to drug-induced falls, resulting in more than 1,500 deaths.”
Go Easy on Drugs!

“Make your doctor justify any drugs he prescribes for you.”

“Make sure the supposed benefits far outweigh all the potential side effects.”

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Ototoxic Drugs are Everywhere

The two most ototoxic classes of drugs are:

- Platinum Anti-cancer Drugs such as Cisplatin
- Aminoglycoside Antibiotics such as Amikacin, Gentamicin, Neomycin, Streptomycin, Tobramycin, etc.
Ototoxic Drugs are Everywhere (cont’d.)

- Cox-2 inhibitors such as **Celecoxib** (*Celebrex*) and **Rofecoxib** (*Vioxx*)
- Propionic Acids such as **Ibuprofen** (*Advil, Motrin*) and **Naproxen** (*Anaprox*)
- SSRIs such as **Fluoxetine** (*Prozac*) and **Sertraline** (*Zoloft*)
- Beta Blockers such as **Atenolol** (*Venapulse*) and **Metoprolol** (*Lopressor*)
Ototoxic Drugs are Everywhere (cont’d.)

- Loop diuretics such as Ethacrynic acid (Edecrin) and Furosemide (Lasix)
- Macrolide antibiotics such as Clarithromycin (Biaxin) and Erythromycin (Eryc)
- Proton pump inhibitors such as Esomeprazole (Nexium) and Lansoprazole (Prevacid)
Cochlear side effects

- Tinnitus
  - Number 1 indicator you may be damaging your ears
  - 529 drugs known to cause tinnitus
Tinnitus sounds

humming
ringing
breaking glass
hissing
sizzling
buzzing
dreadful shrieking noise
beating
whooshing
chirping
clanging
banging
radio static
bells ringing
roaring
whistling
rumbling
chainsaws running
blowing
owls hooting

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Cochlear side effects

- **Tinnitus**
  - Number 1 indicator you may be damaging your ears
  - 529 drugs known to cause tinnitus
  - Tinnitus may be temporary or permanent

- **Hearing loss**
  - Number 2 indicator you may be damaging your ears
  - 400 drugs associated with hearing loss/hearing disorders
  - Hearing loss may be temporary or permanent, and range from mild to profound

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Vestibular Side Effects

- **Dizziness**
  - Most common ototoxic side effect
  - At least 728 drugs can cause dizziness

- **Vertigo**
  - Sensation of movement (normally a spinning sensation) when the body is not moving
  - At least 560 drugs can cause vertigo

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Vestibular Side Effects (cont’d.)

- Ataxia
  - Staggering gait (lack of coordination)
  - At least 350 drugs can cause ataxia
Things You Can Do in Order to Reduce Your Risk of Experiencing Ototoxic Side Effects

See article “Ototoxicity—The Hidden Menace Part I at:

http://www.hearinglosshelp.com/articles/ototoxiceupheaval.htm

Learn more in “Ototoxic Drugs Exposed” chapters 4 & 13
Reduce Your Risk

1. Use non-drug solutions to treat your underlying problems

- Diet
- Exercise
- Emotional/spiritual well-being
- Herbals
- Tough it out
- Alternative/complementary medicine
Reduce Your Risk (cont’d.)

2. Find the least ototoxic option
20.8.12 Beta-Blockers

- Acebutolol: D, T, V
- Atenolol: A, D, HL, T, V
- Betaxolol: A, D, EP, HL, L, T, V
- Carteolol: D, T
- Carvedilol: D, HL, T, V
- Labetalol: D, V
- Nadolol: D, T
- Propranolol: AH, D, HL, T, V
Reduce Your Risk (cont’d.)

2. Find the least ototoxic option
3. Reduce the dose
4. Reduce the number of drugs you take

- Benefit: eliminates a lot of potential side effects
- Benefit: reduces a number of potential drug interactions
- Ototoxic side effects may be additive or synergistic
Reduce Your Risk (cont’d.)

5. Be aware of, and watch out for, the early warning signs of ototoxicity

– Feel dizzy or experience vertigo
– New/louder/different tinnitus
– Hearing drops or fluctuates
– Feeling of pressure or blocked feeling in your ears
When it comes to drugs, you **do** have a choice.

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