

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



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Ototoxic Drugs
flip your world

Upside Down!



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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.”**



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 (Tenormin) 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*)

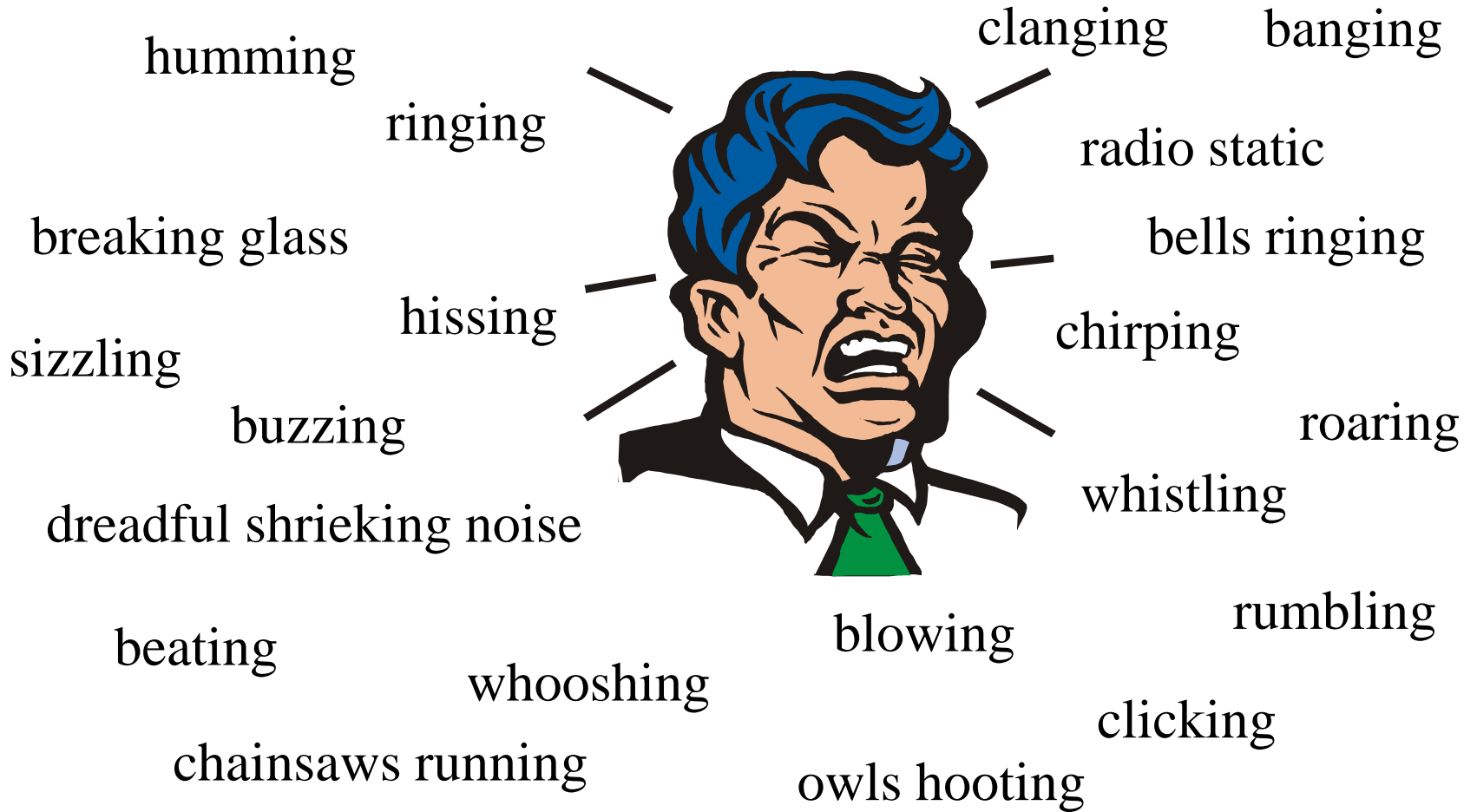


Cochlear side effects

Tinnitus

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

Tinnitus sounds





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



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





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/ototoxicupheaval.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.)

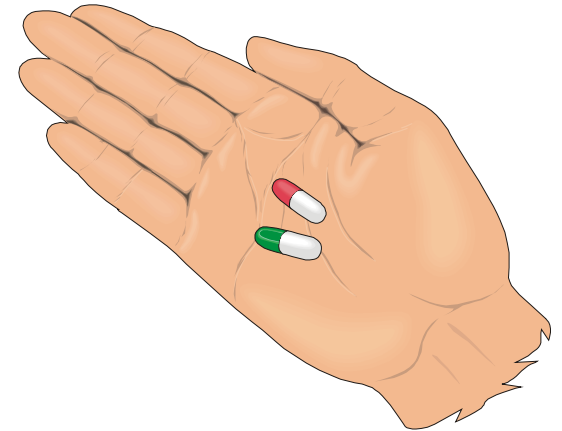
- 2. Find the least ototoxic option**
- 3. Reduce the dose**



Reduce Your Risk (cont'd.)

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**

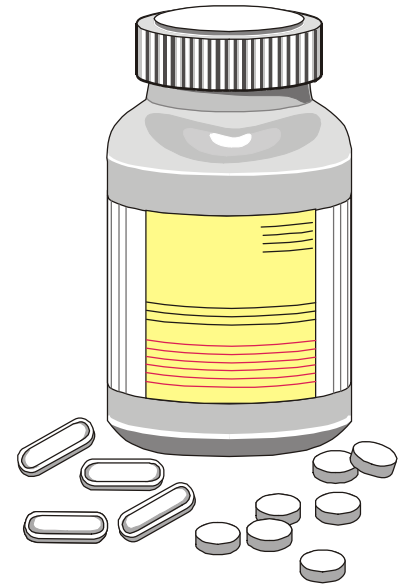




Reduce Your Risk (cont'd.)

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**



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When it comes to drugs, you **do have a choice.**



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