



OTOTOXIC MEDICATIONS

Ototoxic medications are medications that have the potential to affect the hearing structures and/or the balance centers of the individual taking them.

Many medications have the potential to cause hearing loss. Although the list is long (as many as 200) there are some medications that may be more problematic than others.

Sometimes a medication such as those that are used for chemotherapy for example, the risk of hearing loss and deafness must be weighed against the benefits (sometimes lifesaving), to the patient.

The potential for causing hearing/balance problems varies and related to the dose, how long the medication is taken, and if the person's kidneys are able to clear out the medication in a timely way. For some medications there may be a cumulative effect over a lifetime and if the medication is given with another ototoxic drug the likelihood of the ototoxic effects may be increased.

Medications that are given intravenously may have greater potential for ototoxicity depending on the rate of infusion. It's important to keep in mind some people may have a genetic susceptibility to the ototoxic affect of a particular medication.

Always check with a pharmacist when in doubt. Pharmacists are often more able to answer medication questions of this nature than medical doctors since understanding medications is a primary function of their job; check with a pharmacist when in doubt.

Keep in mind that if a person's eardrum is not intact and they are given an ototoxic medication instilled in the ear there are greater chances of having a problem.

Partial list of known ototoxic medications.

Antibiotics:

Aminoglycoside antibiotics: This class of antibiotics shows various degrees of ototoxicity potential. This is especially true when taking the antibiotic with some types of diuretics (Loop). Ask your doctor/ pharmacist.

Streptomycin may affect the balance centers of the ear than the hearing portion.

Neomycin: may the greatest ototoxic affect. Can cause profound deafness but doesn't usually affect balance. May be dose related.

Kanamycin

Amikacin

Gentamicin

Tobramycin _

Vancomycin.

Azithromycin, (rare)

Viomycin,

Chemotherapeutic (antineoplastic) drugs (drugs treating "cancers": those containing platinum (cisplatin and carboplatin) may be most problematic.

Other medications including diuretics:

Salicylates (aspirin, is an example) in high doses (> 12 325-mg tablets) NSAIDs like ibuprofen and naproxen have been linked with hearing issues...may be (dose related and dependent on duration of treatment as well as susceptibility).

Ethacrynic acid

Furosemide

Quinine: Some situations may be more problematic than others.