Ear Drops

There are basically 3 classes of medications that are used as eardrops: **Anti-infectives**, **wax removers**, and **topical anesthetics**. Some of these are by prescription only, thus will only be mentioned briefly in this section.

(1) The **anti-infectives** available over-the-counter are used primarily to prevent swimmer's ear (outer ear infection). These agents generally contain either isopropyl alcohol (rubbing alcohol), or acetic acid (basically white vinegar), or a combination of the two. While meant as preventatives, these may also suffice as treatment for mild cases of swimmer's ear. Prescription medications for swimmer's ear include topical antibiotics as well as hydrocortisone to decrease inflammation. Although, Vosol HC is acetic acid with hydrocortisone and contains no topical antibiotics. Anti-infective eardrops are rarely used for **middle ear infections (otitis media)**. If a child has had pneumatic ear tubes (PE tubes) placed in the eardrum, externally applied antibiotic drops may be prescribed by your child's physician. Commonly used antibiotics for this purpose include gentamicin, tobramycin, and ciprofloxacin. If the child does not have ear tubes, externally applied antibiotics will be useless for middle ear infections. Similarly, garlic oil has no role in fighting either swimmer's ear or middle ear infections and should not be contemplated unless the ear is to be served as part of a main course.

(2) Wax removal is rarely necessary, so it is no surprise that **wax removing agents** are rarely necessary. When you child's doctor advises, various agents may be helpful. The most cost efficient is **warm water**, however, if wax removal is not successful and water remains in the ear canal, there is increased risk of external otitis. **Hydrogen peroxide** can also be helpful. **Mineral oil** can soften the wax and may aid its removal at the doctor's office. Two medications have been formulated and marketed for the sole purpose of wax removal: **Debrox** is an over-the-counter product containing carbamide peroxide, citric acid, glycerol, propylene glycol and other ingredients; **Cerumenex** is a prescription product.

If using a bulb syringe do NOT create a seal with the orifice of the ear canal or perforation of the eardrum is possible. Use of a bulb syringe is always uncomfortable and often not worth the effort. When it has been advised to use one, make sure that the liquid (usually water or hydrogen peroxide mixed with water) is body temperature to decrease discomfort and reduce temporary balance problems and nausea.

(3) The final class of eardrops is the **topical anesthetics**. These are available by prescription only-probably to prevent prolonged symptomatic treatment of ear infections which require definitive antibiotic treatment. Nevertheless, these agents generally come in a 10 milliliter bottles which is a volume many times greater than what is needed for a single middle ear infection. For that reason many parents, sometimes at the advice of the pediatrician, save the remaining medication for future episodes. This is probably a reasonable practice, although it is important that these drops never be applied without the advice of a physician.