

## Appendix 5

### Is Swimming OK for Children with Tubes?

By David DuBois, Chairman U.S. Swim School Association Committee on Infant Swimming

The issue of ear infections has long been at the forefront of the concerns parents have about getting into swimming lessons. It has generally been accepted that swimming is not a causative factor with inner and middle ear infections, but myths regarding this still prevail. It is often incorrectly assumed that water getting into the ear while swimming causes ear infections. While this could play a role in a condition affecting the outer ear canal, such as "swimmer's ear," in reality, pathogens traveling internally through the Eustachian tubes into the middle and inner ear are the primary cause of the ear infections which affect children. There is no medical evidence that I have seen correlating swimming and ear infections.

Another question that generally arises in relation to ears and swimming is if children with "tubes" should be allowed to swim. Children with chronic ear infections sometimes have a procedure called myringotomy, or tympanotomy, performed. This involves making an incision in the eardrum to help drain fluid and allow an exchange of air between the middle and outer ear. Tubes, or grommets, are inserted in the incision to maintain the opening. It has often been assumed that because of this opening, children with tympanostomy tubes should not be allowed to swim.

In the U.S. Swim School Association's Infant/Toddler Swimming Course there is reference to a study that states "children with grommets (tubes) should be allowed to swim" (British Medical Journal: 25th January, 1992. Volume 304. Page 198.) That study showed no increased risk of ear infections to children with tubes. There was even some evidence to suggest that the children who swam had lower an incidence of ear infections. The study did give some cautions about bath tub water where soaps and bacterial loading could be significant. That reference is now ten years old.

There is more recent information to support the advice that swimming with tympanostomy tubes is permissible. Carla Giannoni, MD states, "I believe that children should be allowed to swim following a TT (tympanostomy tube) surgery. The dangers of water exposure are more theoretical than observed. Ear protection and water avoidance are unnecessary burdens to place on our patients." (Swimming with Tympanostomy Tubes, ARCH Otolaryngol Head Neck Surg/Vol 126, Dec 2000, Page 1508 - 1509) Dr. Giannoni does, however, go on to caution about bathing, "Soapy bathwater can carry microbial pathogens into the middle ear through the TT. Head submersion in soapy, dirty bath water may increase the risk of otorrhea and infection when TT's are in place." There are also some cautions given about diving when tubes are in place, particularly in lakes and ponds as the increased pressure and microbial presence can cause problems.

In addition to the question of whether to swim with tubes or not, there is the question of whether to use ear plugs. Dr. Giannoni summarizes data provided in other sources by saying, "Several other studies have shown trends to higher rates of infection when earplugs were worn by swimmers." While this data isn't conclusive, most information seems to support that not only do ear plugs not help in preventing problems while swimming, but may actually cause increased infection.

In the same journal listed above, Dr. Giannoni's article was reviewed by other medical professionals who supported her claim. Charles M. Myer III, MD, offered the following, "My personal philosophy is similar to that of Dr. Giannoni. When questioned by parents of children with TT's regarding my attitude about swimming, I tell them that I would rather treat a child with a draining ear than a victim of drowning. Though this response is somewhat facetious, it is the case that otorreha in children who swim with TT's can be treated readily with topical agents and, if necessary, systemic antimicrobial therapy. *Surface and shallow water swimming should be encouraged in all children as a normal developmental activity.*" Linda Brodsky, MD, also adds, "It is my practice to allow children with TT's to swim and bathe without ear protection. For lake swimming I do warn about potential problems."

It is not the place of swimming professionals to diagnose any medical condition or to contradict advice given by a doctor. However, it is the job of swimming professionals to educate their clients and develop their programs following the most up to date and accurate information available. What is presented here is information from the medical community stating that swimming is a healthy, worthwhile activity, and that ear infections, and in particular swimming with tubes, should not prevent children from accessing the possible developmental and safety benefits that swimming has to offer.

I hope some of this information will be helpful in dealing with the issue of ears and swimming.

Happy Swimming!

(Thanks to U.S. Swim School Association member and Registered Nurse Ann Shidler for bringing Dr. Giannoni's article to my attention.)