Summertime ear pain? It might be swimmer’s ear



These lucky fish don’t have to worry about swimmer’s ear… they don’t have any ears! –Photo by Dirk Peterson, MD

It’s the type of ear pain that usually creeps up on a school-aged summer camper. One night he may notice discomfort when his ear is against his pillow. The next night, the pain gets worse. Eventually, even touching the ear is painful. The ear is probably infected, but infected with “the other kind” of ear infection—swimmer’s ear.

Ear infections are divided into two main types: swimmer’s ear (otitis externa) and middle ear infections (otitis media). An understanding of the anatomy of the ear is important to understanding the differences between the two types of infection. Imagine you are walking into someone’s ear. When you first enter, you will be in a long tunnel. Keep walking

and you will be faced with a closed door. The tunnel is called the external ear canal and the door is called the ear drum.

Swimmer's ear occurs in the ear canal. Dampness from water, and it can be water from any source- not just the pool, sits in the ear canal and promotes bacterial infection.

Next, open the door. You will find yourself in a room with a set of three bones. Another closed door lies at the far end. Look down. In the floor of the room there is an opening to a drainage pipe. This room is called the middle ear. This is where middle ear infections occur.

During a middle ear infection, fluid, such as during a cold, can collect in the room and promote bacterial infection. Think of the sensation of clogged ears when you have a cold. Usually the drainage pipe, called the eustachian tube, drains the fluid. But, if the drain is not working well, or is overwhelmed, fluid gets stuck in the middle ear and become infected.

Because a swimmer's ear infection occurs in the external canal, the hallmark symptom of swimmer's ear is pain produced by pulling the outside of the ear. Since middle ear infections occur farther down in the ear, pain is not reproduced by pulling on the outer ear.

Doctors treat swimmer's ear topically with prescription antibiotic drops. To avoid dizziness and discomfort when putting drops in, first bring the ear drop medicine up to body temp by holding the bottle in your hand.

Home remedies to prevent swimmer's ear:

- After immersion in the water, tilt your child's head to the side and towel dry what leaks out.
- Mix rubbing alcohol and vinegar in equal parts. After swimming, place a couple drops in the ear. Do not put these drops in if there is a hole in your child's

eardrum.

- Prior to swimming put a drop of mineral oil or olive oil in each ear. This serves as a barrier protection against the water as well an ear wax softener. Do not put in if there is a hole in your child's eardrum.

Although it's tough to remind children to dry their ears well, take heart. Dr. Lai once spent two hours trying to get a cockroach out of a child's ear canal. We suspect those parents would have been happier if instead, water had gotten into their child's ear.

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What to do for your child's ear pain

“MY EAR HURTS!!!”



Most parents cannot diagnose their child’s source of ear pain, especially in the middle of the night. Even I can’t diagnose my own children at home because my portable otoscope, the instrument used to examine ears, died from overuse several years ago. However, there are ways to treat ear pain **no matter what the cause**.

Good pain relievers such as acetaminophen (brand name Tylenol) or ibuprofen (brand names Advil and Motrin) treat pain from any source, including ear pain. Treating pain does not “mask” any physical exam findings so please go ahead and ease your child’s misery before going to your child’s doctor. I cringe when parents tell me, “We didn’t give him any pain medicine because we wanted you to see how much his ear is hurting him.”

Heat, in the form of warm wet compresses or a heating pad, can also help. Prop your child upright. If the pain is from an ear infection, the position will relieve pressure. Distraction such as a 2:00 am Elmo episode can also blunt pain.

Fewer than half of all patients seen in pediatric offices with ear pain, or “otalgia,” actually have a classic middle ear

infection. Sometimes kids with cold virus get ear pain that comes and goes, perhaps from the general congestion in their sinuses and nose. Pain can stem from many sources, including the outer part of the ear. Swimmer's ear, which is an outer ear infection, is treated differently than a middle ear "inside" infection. Nearby body parts can also produce pain. Throat infections (pharyngitis), from strep throat or viruses, often cause pain in the ears. Even pain from jaw joint strain and dental issues can show up as ear pain. Over the years I have sent several children straight from my office to the dentist's office for treatment of tooth ailments masquerading as ear pain.

No post on ear pain would be complete without addressing "ear tugging." Many babies by nine months of age discover their ears and then play with them simply because they stick out (I will leave to your imagination what baby boys tug on). Babies often tug on ears when they are tired. Therefore, tugging on ears alone may not indicate an ear infection, especially if not coupled with other symptoms.

Although ear infections are one of the most common ailments of childhood, and most children have at least one ear infection by age three, remember that not all ear pain is caused by ear infections. In the middle of the night, and even in the middle of the day, it IS okay to give some pain relief before seeing your child's health care provider.

Why ear pain always seems to awaken a child in the middle of the night, I'll never know. All I know is that I have to remember to buy a new otoscope for home.

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