A child-centric microbiology education framework

Earache

Mummy: My ear is hurting!



#earache" by Mish Mish is licensed under CC BY-NC-ND 2.0.

Aarón Gutiérrez Pastor

Médico Especialista en Medicina Familiar y Comunitaria. Consejería de Sanidad Universal y Pública de la Comunidad Valenciana

A child-centric microbiology education framework

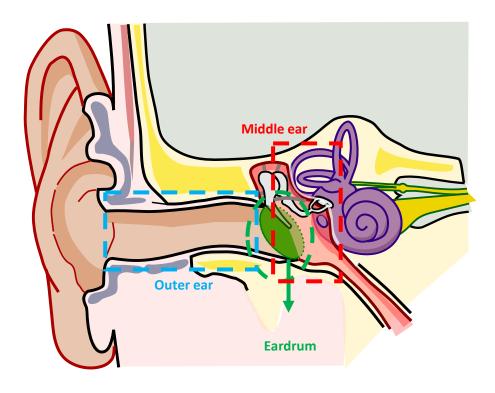
Earache

Chloe was looking forward to her eighth birthday. After spending the summer at the beach house enjoying the sea and the pool, she was finally going to be reunited with her friends from school. But a few days before, she noticed that one of her ears was hurting. This had already happened to her when she was younger and she remembered that she suffered a lot from earache when she got sick and had a lot of mucus.

What is otitis?

Otitis is an inflammation of the structures of the ear, usually caused by an infection, which can be viral or bacterial.

In order to understand the different types of otitis, we need to know that the inside of our ear is divided into two main parts. The outer part is called the outer ear and is made up of a long corridor that leads to a space called the middle ear. The two parts are separated by a large, thin flap, known as the eardrum. The causes of infection in these two parts of the ear can be different and are therefore better explained separately.



Middle ear infections - otitis media - and colds

Acute middle ear infection is an infection of the part of the ear just behind the eardrum, with viruses and bacteria multiplying in that space.

It is one of the most common infections and almost every child has had otitis media at some time. Normally, the earache appears after several days with a cold and a lot of mucus in the nose. For this reason, it is common to also have a fever during those days.

To find out if you have otitis, the doctor will look in your ear with a small device with a torch in it called an otoscope and will be able to see if the eardrum has turned red.

A child-centric microbiology education framework

Although the most common cause of infections is viruses, *acute* otitis media is usually caused by bacteria. Therefore, if you still have pain or fever after taking pain relief syrup for 2 or 3 days, you will need to take antibiotic syrup to kill the bacteria responsible for the infection.



A clinician conducting an examination of a young female patient's left ear, using an otoscope. by Centers for Disease Control and Prevention is marked with CC0 1.0.

External ear infection and the swimming pool

External ear infection is an inflammation of the part of the ear that we see from the outside, before reaching the eardrum. It is most often caused by a bacterial infection, which usually settles in this passage of the ear when there is warm water inside the ear. Therefore, this infection appears more frequently in the summer months and in children who spend a lot of time in the water at the beach or swimming pool and do not dry their ears properly.

When this part of the ear becomes inflamed, you will feel pain, especially when your ear is pulled or when you chew to eat.

In this case, after looking through the otoscope and verifying that we have otitis, the doctor will prescribe some antibiotic drops that we will have to put into the ear to attack the bacteria. In addition, until we manage to eliminate them, we can take some syrup so that we don't have any pain.

When Chloe went to the paediatrician that day, they looked in her ear with that light device that is a bit annoying, and they told her that she had external ear infection. For 5 days her mum kept putting those little drops in her ear that tickled her and she couldn't go swimming in the pool that week. But this didn't stop her from celebrating her birthday. After two days of putting in the drops and taking paracetamol syrup, the pain was practically gone, and Chloe was able to enjoy her long awaited day with all her friends.