Meningitis

Mummy: I feel sick! I have a headache and I'm going to throw up!!



Photo by Victoria Rain: https://www.pexels.com/photo/little-boy-checking-body-temperature-4345670/

Ana Gilabert Mayans

A child-centric microbiology education framework

Meningitis

Gonzalito is a 4-year-old boy who has spent a fun weekend with his siblings and parents. On Monday, however, when he wakes up to go to school, he feels strange and doesn't feel like eating breakfast. When he gets out of bed, he feels like throwing up and, scared, he calls his mother screaming.

"What's wrong, Gonzalito?

And suddenly, he vomits up all the pizza he had eaten for dinner on Sunday, staining the carpet in his room. "Mummy!" he repeats crying over and over again in fear.

Gonzalito feels sick, he just wants to be in his mother's arms and he puts his hands on his head all the time. His mother feels him getting warmer and warmer. She takes his temperature: he has a fever!

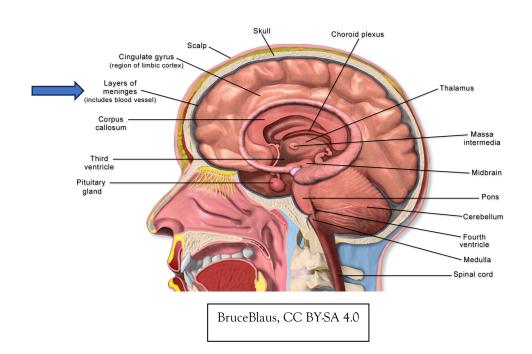
"Gonzalito, let's get you changed, we're going to the paediatrician"

When we get to the paediatrician, Gonzalito doesn't feel like talking, he falls asleep on the stretcher, his skin is hot, and he can't move his neck. "It could be meningitis," thinks the doctor.

So what is meningitis?

Our brain (and the spinal cord that connects the brain with the rest of our body), and the liquid it floats in, are surrounded by a layer, like a balloon. Imagine, so to speak, that our brain is inside a water balloon. The balloon would be what we call "meninges" and the water would be the fluid that protects the brain.

When we say "meningitis" we mean that there is an inflammation of the layer that surrounds the brain, i.e. the balloon. This is usually caused by an infection by a virus or bacterium.



A child-centric microbiology education framework

Why does the doctor think Gonzalito may have meningitis?

Because the "balloon" is so close to the brain, when it becomes inflamed with an infection – meningitis – it makes our head hurt, we feel a bit sleepy, we don't feel like playing and sometimes we can also vomit. We will also notice that we cannot move our neck properly. As meningitis is caused by an infection, our defences are activated to fight it and produce a fever, which we notice when our skin feels warm.

How do we treat meningitis?

The paediatrician, as soon as he realised that what was happening to Gonzalito could be meningitis, ordered a blood test and, through a prick in the back, took a little bit of the liquid in which the brain and spinal cord floats. Afterwards, he started Gonzalito on medication to help his defences fight the virus or bacteria that had made him ill, and he had to stay overnight in hospital. After a few days, Gonzalito is feeling better, he wants to play, to eat and he can move his neck well. So, his paediatrician decides that it is time for him to go home, with his parents and siblings.

What can we do to avoid meningitis?

I'm sure you remember that when you were very young, your mum or dad used to take you to the paediatrician and the nurse would give you a little prick with a needle: a vaccine. Vaccines prevent us from getting infections because they make our defences fight better against the microorganisms that can cause disease. There are excellent vaccines against meningitis so this is the best thing we can do to avoid it.



Photo by Nataliya Vaitkevich:

https://www.pexels.com/photo/person-wearing-latex-gloves-vaccinating-a-man-in-gray-shirt-8830485/