

Ashlynn blocker



**ASSIGN
BUSTER**

Ashlyn Blocker was born with a condition called congenital insensitivity which leaves her feeling absolutely no pain. The disease is caused by two found gene mutations which cut off the pain signals that are sent to Ashlyn's brain. Her doctor's name is Dr. Roland Staud who is a pain expert and professor in the University of Florida's college of medicine. There are only 20 documented cases of insensitivity to pain in our entire country which makes Ashlyn's health issue "one in six billion".

Ashlyn lives with her family in Georgia, her parents struggle to keep her safe. Ashlyn never cried when she was a baby so her parents just thought that she was a happy child however when Ashlyn was diagnosed with a corneal abrasion and was smiling in her mother's lap it was evident that she doesn't feel pain like a normal child. For a long time, Ashlyn's parents knew something was different about her but nothing could be diagnosed. Dr. Staud was able to discover what gene was the cause of Ashlyn's insensitivity to pain.

Tara and John Blocker were ecstatic when the four year process came to an end. The SCN9A gene was mutated. This gene contained the signal that starts the production of the molecules that stimulate pain-signaling nerve cells so they can send the pain impulses to the brain. There are two extremes caused by the mutation, too much of the molecule so the patients feels extreme pain or too little of the molecule which causes the patient to not feel pain.

Ashlyn can feel a tickle or a touch but not a painful pinch or a burn. This is because the mutation decreased her sensitivity to pain and did not eliminate it entirely. It's dangerous because Ashlyn doesn't know when she's harming

her body. Pain is warning signal that alarms a person to stop whatever they are doing because it's hurting your body. Since Ashlyn does not have a sense of pain, she has no empathy when she sees other people crying because she can't relate with the pain that they are feeling.

Scientists could use gene therapy to manipulate the genes to allow Ashlyn to feel pain but the risk is epilepsy or hypersensitivity to pain. Dr. Staud wants to do more research before performing any gene therapy on Ashlyn because it could cause her to constantly feel pain. In the article we read in class about Ashlyn Blocker, the gene that caused her rare disease was still unknown. Ashlyn was only 5 years old, now she is 11. Ashlyn still cannot feel pain however her parents are more at ease because they know the exact cause of the disease.

Her parents now have more precise answers to why their daughter cannot experience pain. It took Ashlyn's doctor four years to discover the gene that was mutated. The more recent article describes the cause of Ashlyn's condition which is a gene mutation. Ashlyn is now a patient of Dr. Staud who is a pain expert. Ashlyn's case was brought to his attention by the USA today article and segment we read in class. Dr. Staud started a research study to take a closer look at Ashlyn's condition.

It also explains how Ashlyn is also suffering psychologically because of congenital insensitivity. Ashlyn cannot empathize with others since she can't identify with the physical pain that her peers are feeling. If she sees a friend crying because they hurt themselves she can't understand why her friend is so upset. The article also names various injuries that Ashlyn has suffered

including breaking an ankle while riding her bike and then her parents not noticing it until days later.

The recent article explains treatment called gene therapy that Ashlyn could possibly undergo one day to be able to feel pain. The risk is that she might feel too much pain and become hypersensitive to it instead of insensitive. Pain is necessary because it tells our brain when we're hurting our body so we stop doing whatever it is that is causing the pain. Since Ashlyn cannot feel pain she is at a high risk of damaging her body permanently since she doesn't get the signal to stop harming her body. Ashlyn still has to deal with being different.

I doubt her teachers still try to help her blend in like they did in the older article. Ashlyn now needs to learn how to cope with her disease on her own. Ashlyn's body cannot produce the molecule that stimulates the pain-signaling nerve cells. She can feel a tickle or a touch but she can't differentiate between temperature extremes. Later in life, Ashlyn will not be able to know when she is experiencing heart troubles or trouble breathing because she won't feel any pains which are the warning signs of the life threatening conditions.