

Human behavior is not always rational, and, in times of great stress, instincts take over. When this happens, we perceive everything in our environment as a possible threat. With this animation, I explored my idiopathic scoliosis and the chronic pain it causes. I used 2D Photoshop animation with jarring colors to portray my fear of spinal fusion surgery.

In attempts to fight the spine's curvature, doctors often use treatments that do little to improve, and often worsen, a patient's quality of life. Even with these questionable treatments, many people still require surgery to correct the curvature. Spinal fusion surgery is most common, in which a metal rod is inserted to support the spine.

If left untreated, my scoliosis will lead to deformities in the ribcage, which can result in heart and lung problems. Leaving the scoliosis to run its course causes me as much distress as the thought of surgery.

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Human behavior is not always rational, and in times of great stress, instincts take over. When this happens, we tend to perceive everything in our environment as a possible threat.

This paper addresses the question: what does it mean to be afraid?

It explores what I am afraid of and what causes me fear. I focus on my fear of pain with scoliosis surgery, otosclerosis, and the use of liquid nitrogen on my body.

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I have idiopathic scoliosis with a severe curve that may require surgery.

I have scar tissue in my ears from multiple ear infections as a toddler.

I had a recent experience with plantar warts being frozen from my feet with liquid nitrogen.

These three experiences have made me afraid of enduring pain.

My feet dangle from the examination table, anticipating the doctor's arrival. My eyes are stuck on the mural in front of me: a girl on a horse, looking at a wide landscape. The painting stretches around the entire room, tucking me into a state of impatience. I fiddle with the light box on the far wall, making it flicker. I had seen them at my mom's office and was always transfixed by the bright color that came through. Doctor Dryden knocks on the door and I rip my hand from the box, and move it to fiddle in my lap. Today is a special day. Probably the most special in my entire life. My hands fidget again, but this time in excitement.

I thought getting my scoliosis brace was the most exciting thing in the world. I considered my brace a superpower, a plastic armor I wore twenty-three hours a day, every day. It made me feel powerful. I was very compliant and did everything the doctor told me to do. I thought the pain I went through was a part of normal life.

Scoliosis is an abnormal sideways curvature of the spine. If left untreated, scoliosis can lead to deformities in the ribcage, which can result in heart and lung problems. Scoliosis causes chronic pain, emotional stress, fatigue, headaches, difficulty sleeping, and digestive problems. In attempts to fight the spine's curvature, doctors often use treatments that do little to improve, and often worsen, a patient's quality of life. "Not only does wearing a brace cause physical pain and discomfort, but it has been linked to low self-esteem, high depression rates, and other forms of psychological duress" (treatingscoliosis.com).

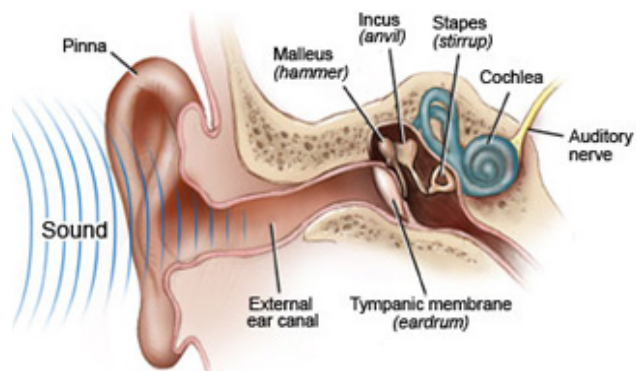
From the summer before fifth grade until freshman year, I had to get my scoliosis brace remolded every few months to fit me as I grew. This often didn't do much, and I have scars on the bottom of my chest and hips from the brace not fitting.

Even with bracing, many people still need surgery. Spinal fusion surgery is most common for scoliosis patients, in which a metal rod is inserted to support the spine. And although "half of all spinal fusion patients suffer long term complications and forty percent end up severely disabled" there is little research being done on other forms of surgeries (treatingscoliosis.com).

Flexible fusion vertebral body tethering is a less invasive surgery that allows the spine to move and bend, giving the patient more freedom of movement. Although it's a generally new concept, it is showing great results, and is a far better option than spinal fusion surgery. Nonetheless, fewer people qualify for it and not that many doctors perform it.

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A series of events must take place in order to hear. Sound waves enter the outer ear and travel through the ear canal which leads to the eardrum. The eardrum vibrates bones in the middle ear. These bones amplify the sound vibrations and send it to the cochlea, a structure in the inner ear. The fluid inside the cochlea forms a wave, moving hair cells that



are on the bottom of the cochlea. These hair cells bump up against an overlying membrane, causing chemicals to rush in, creating an electric signal that is carried by the auditory nerve to the brain.

Otitis media is an infection of the air-filled space behind the eardrum. I had otitis media constantly as an infant until I got myringotomy tubes at the age of two. Myringotomy tubes are drainage tubes that deal with chronic middle ear infection and stop rupturing in the eardrum. I had about nine eardrum perforations, or holes in the tissue that separates the ear canal from the middle ear. From this, I got major scar tissue in my ears, which later developed into otosclerosis: an abnormal remodeling of the middle ear. Scar tissue has less blood supply than normal tissue, making it less resistant to infection. The eardrum eventually dissolves away, leading to hearing loss. This also causes air pressure change to be painful and it is extremely difficult for me to travel long distances. Currently, there is no effective treatment for otosclerosis I have. My biggest fear surrounding this is that every time I travel, I anticipate severe pain and I feel like my doctors have no way to fix it.

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Plenty of people get warts removed. It's a common occurrence. But for me this experience was terrible. I was unable to walk for a week without being in severe pain. I just had this great big limp and I was terrified of people looking at me and asking what was wrong. I just wanted to rip my foot off. And then, about a month later, when I thought it was over, they made me do it all over again.

Warts are fed by blood vessels and if you damage the vessels by freezing, the warts will die and eventually fall off. Dermatologists freeze them with liquid nitrogen, which can be very painful and cause tissue damage.

**A piece of writing from when I was sitting in the waiting room  
before getting my warts removed for the second time:**

*I sit in a room so spacious,  
yet cramped at the same time  
I feel framed here  
Stuck in the same moment, sitting, sitting  
I never stop waiting  
Waiting for the pain*

*The ow ow ow biting my feet  
Stings so bad I can't breathe  
Waiting for the doctor to rip off my skin  
And then try to piece it back together  
Can't walk, can't breathe  
All I feel is this sting running through me*

**About 20 minutes later, waiting for my mom to schedule the next appointment:**

*A knife is carving up my skin  
Burning, burning, I can't breathe  
Teeth clenched, face askew  
Don't cry, you're in public  
Mouth sealed because I may scream  
I grip my ankle but nothing helps  
I just need to wait until I'm used to the pain*

I don't want to think about this anymore, it's too scary. I want to stop seeing the word surgery. I want to rip up the letters and set them on fire. I feel like a doll. A figurine that doctors can look at and experiment on. My back feels like it's going to explode when I sit up straight. I hate the looks I get on planes because my ears feel like they're bleeding. I am learning that I can handle too much and I can walk when my vision turns black and I can run when my lungs are collapsing. My mom says the pain I have been through is traumatic but I don't understand what she means because it doesn't feel traumatic. It feels normal.

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