Magnetic Resonance Imaging: A View From the Inside

Joyce Marrs, MS, APRN-BC, OCN®, AOCNP

This new column will provide nurses with an opportunity to describe a personal experience with the healthcare system, giving a new perspective to nursing care. For more information, contact Editor Joyce P. Griffin-Sobel, RN, PhD, AOCN®, APRN-BC, at CJONeditor@jsobel.com.

The inside of the magnetic resonance imaging (MRI) machine was dimly lit. The wall was just inches away from my face, and I was unable to move to see what was on either side of me. I strained to turn my eyes as far to the right and left as possible but could only see the bars of the frame immobilizing me and the darkness beyond. When I looked up, I felt as if the ceiling was going to crush me and decided that maybe it was better to keep my eyes closed after all.

MRI, developed in 1977, uses a strong magnet and radio waves to produce precise images. These images have become a mainstay of the diagnostic toolbox. Patient education about the procedure includes an explanation about the noise, the need to remain still, and the potential for feeling claustrophobic. I have explained the procedure to patients many times. So, when I needed an MRI, I assumed I was prepared. I was in for a surprise—as you can see from my description of the experience in the paragraph above.

I have explored caves (spelunking) twice in my life. As teenagers, my friends and I explored a small, muddy cave. Many portions of the cave were so small that we had to squirm through on our bellies. If we lifted our bodies, even inches, we would feel the cold dampness of the cave ceiling. My MRI scan took me back to that experience.

The radiology staff explained each step of the test. The technician helped me on to the cold, hard table and placed a frame over my chin, neck, and shoulders to immobilize me and left the room. From that point on, my human connection was the disembodied voice of the technician over a speaker from the control room.

I was unable to move from the shoulders up and was thankful I was not nauseated. My earplugs muffled the noise. The technician told me to close my eyes when entering the machine. The table slowly moved me into the scanner. Whirr. Silence. Whirr. Silence. The table stopped and moved in and out until most of my body was in the machine. I felt a cold, firm surface against my arms. It was a cave minus the dampness.

I then was allowed to open my eyes. Mistake. I quickly closed them. I took a slow, deep breath, relaxed, and asked myself if I should risk opening them again. I could picture my younger brother giving me advice years earlier. “It’s better to keep your eyes open on a roller coaster to see what is coming than to keep them closed and fear the unknown,” he had asserted. Maybe he was right. I took a slow, deep breath and opened my eyes again.

“The machine is going to start,” the tech said. “You will hear a lot of noise.” Clang! Clang! The sound was not unbearable, perhaps because of the earplugs, although I would have preferred quiet music. After a few minutes, the clanging stopped, and the tech told me the table would move back out. “Keep your eyes closed as you come out of the machine,” she cautioned. Whirr. Silence. Whirr. Whirr. Thinking that the test was done, I was impressed at how quickly it was over. Wrong! The tech made some adjustments and started the process again.

Time passed slowly; I wanted to move. As I became increasingly impatient and felt the need to go to the bathroom, the voice told me that the test was partly done. “The sound of the machine will change to a faster speed,” the voice warned. What seemed like an eternity passed, and the new noise started irritating me.

I opened my eyes for lack of anything else to do—boring, boring. I thought about how it felt 30 years ago to be spelunking and decided the cave was the more pleasant setting because at least there I could move around and talk with my friends instead of listening to the rhythmic boom, boom, boom as I lay tethered to the machine. I took a few slow, deep breaths. That allowed me to concentrate on something other than the noise and my inability to move.

Just as I wondered how much longer I would have to remain still, the noise stopped and the disembodied voice said, “You’re done.” With my eyes closed as the table moved out, I remembered that day in the cold, dark, cold, damp cave.
cave and how beautiful the light looked after hours of being in near darkness. I felt a change in the air from inside the machine to the room. The machine stopped. What a relief! It was over.

Afterwards, I thought about how I could use my experience to better prepare patients to go through this test. I changed my patient teaching to include a reminder to use the bathroom prior to the test, to caution patients against opening their eyes while in the machine, and to advise patients to use breathing exercises, relaxation techniques, or imagery to fill time and decrease anxiety while in the MRI scanner. My experience helped me to better prepare patients for the reality of the experience.

As nurses, we spend much of our time trying to prepare our patients for tests and treatments. Although I didn’t enjoy the MRI experience, it made a real difference in my ability to see “our” world from the patient perspective—a perspective that sometimes gets lost in the day-to-day business of diagnosing and treating. Appreciating that perspective has made me a better nurse.

Want to learn more? To read about various radiologic procedures and examinations, visit www.radiologyinfo.org.

Author Contact: Joyce Marrs, MS, APRN-BC, OCN®, AOCNP, can be reached at joycemrn@sbcglobal.net, with copy to editor at CJONeditor@jsobel.com.