

Medicine and Humanity

The cell is the simplest form of life. Named after the small, simple rooms in which monks would confine themselves; these units of life are far from simple. Cells conduct multiple functions to fulfill different niches and coordinate their tasks to create a living, breathing human. However, these biological rooms may become defective as the cells' DNA become damaged by the sun's rays, unhealthy habits, or the passage of time. These cells mutate causing them to disregard the checkpoints that maintain normal growth. They ignore the needs of the body by selfishly focusing on their own reproduction. They become more rebellious than juveniles, and they grow rapidly like adolescents experiencing a growth spurt. Most of the time, the immune system hunts these errant cells and eradicates them.

Unfortunately, when these recalcitrant cells slip past the defense of the immune system, they continue their rampant division and form delinquent congregations known as tumors. The progression of malignant tumors is known as cancer.

The biological betrayal that is cancer has grabbed the attention of the scientific community as researchers seek to understand the workings of these deviant cells. Science has done a great deal in trying to understand why cancer cells turn away from their normal role within the body by using models and computer simulations to try to comprehend the progression of this disease. I also have found myself fascinated with cancer. Much of my early comprehension of the disease came from the scientific models taught to me in lectures and seminars, but when my father was diagnosed with a progressive form of oropharyngeal cancer during my sophomore year of college, I was exposed to truths science is unable to teach. Science, it seems, has its limits.

Shortly after his diagnosis, I explained to my father the best I could what was happening to his body. I talked about the erroneous cells and their ability to circulate around the body affecting other organs. I held his hand and explained what radiation treatment would do to his normal cells that replicated quickly akin to cancer cells. I explained the loss of taste, the pain that would arise from a raw throat, and the radiation burns that would open his skin and raze his hair. I tried to reason with him and explain the science, the world that fascinated me and helped me digest the news. Naturally, he could not help but cry. The science was not important to him, and how could it be? I began to realize that science is not enough.

My father went through three months of radiation treatment. By his last week of therapy, he could no longer talk. The treatment had left him unable to eat or drink. His skin oozed pus and blood. His burnt neck caused him to writhe in pain. The tumor pressed against his vocal cord; the rebellious cells holding down my dear father's voice. I watched as an ENT physician shoved a tube down my dad's digestive tract through his nostril to feed him. I heard him cry out like a wounded animal as they advanced the tube down his raw throat. Science could not prepare me to handle this disease and its accompanying emotions as a family member. All it could do was explain the situation in front of me.

Two months later, I visited my father who was once again in the hospital after an emergency tracheotomy. He was furious. He never wanted to have a "dehumanizing and disgusting" tube shoved into his throat. I dared not try to explain the medical science behind the decision to do a tracheotomy, but instead held his hand. Science has its limits.

During my father's stay, a team of physicians and trainees came one evening to perform an abdominal paracentesis, a removal of fluid from the abdomen. The senior resident began explaining to the medical student and intern where to insert the needle anatomically and how to angle the sharp object. I joined in on the teaching moment by asking questions about the ultrasound while suctioning my father's tracheotomy tube. This brief return to the science of medical care was incredibly therapeutic to me.

While waiting for the peritoneal cavity to empty, everyone in the room turned their attention to the football game on the television, the Wisconsin Badgers were playing the Nebraska Cornhuskers. Earlier in the day during rounds, my father, notably an avid Badger fan, went against his roots and bet the attending physician that Nebraska would win the game. Everyone in the room knew of the underlying friendly bet that rested on the outcome. On the final play that sealed the contest in favor of Wisconsin, the entire room erupted in cheers, and in that moment, it became clear that science is only half the story of medicine. My father's face lit up in shock and excitement for the first time in months. He tried to high five the sterile resident who laughed and directed him to celebrate with the non-sterile intern. The medical student and I jumped up and down holding each other in an elated celebration. The attending physician walked in and buttoned down his shirt to reveal a Wisconsin Badger's t-shirt as he laughed and shook hands with my dad. For a moment, my father did not have to be acutely aware of his cancer. The people in the room took that pain away.

In this moment, I was reminded of the beauty of medicine. Medicine, rooted in the fact that we are all human, transcends the limits of science. My dad appreciated when the physicians turned off their scientific dialogue to talk with him as a person and explain his illness in simple, digestible terms. He appreciated it even more when they connected with him outside of his medical situation by bonding over a football game. He did not care that his cells were aberrant. He did not want to know that cells are named after rooms pious men stayed in during their holy lives. He was not concerned with dysfunctional checkpoints in the reproduction of cells. He only needed to be treated with the tenets of science, not the details.

My dad passed after seventeen months of battling cancer and its brutal side effects. It was his family and friends that provided comfort and peace during the struggle; a respite not offered by science. While medication dulled the pain, laying on a hammock with his wife and dog provided him the greatest comfort in his last moments. Medicine treats, but it is people who heal us. As a future physician, this will forever resonate with me in my approach to treating my patients. When science faces its limits, humanity picks up the slack.

Thank you for everything, Dad. I miss you.



