A Family of Withering Bodies

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September 2014, my mother.

 October 2020, my grandmother.

 September 2021, my grandpa.

 January 2022, my uncle.

 Starting in fifth grade, I became familiar with watching helplessly as my family members went through cancer treatments, mainly chemotherapy. I knew what days of treatment and the following week would entail as their bodies seemed to slowly change, sometimes, into people I could barely recognize.

 It started with my mother. My dad picked me up from school and was silent the entire drive home. I was about 10 and lacked the social cues to notice that something was incredibly wrong. We got home and my mom’s car was in the driveway, which was something that was abnormal since my dad had picked me up early as well. We walked inside and I went upstairs where I saw my mom crying on her bed. My dad called me away from the room and I sat in my room until my dad called my brother and I down to the dining room. As my brother and I looked at our parents across the table, my mom sat silently sobbing as my dad said the words I never thought I would hear, let alone get used to hearing.

 “Your mom has breast cancer.”

 I had never understood when people said the world went quiet until that Thursday after school. I only told my teacher and one or two close friends who frequently saw my mom and would notice the changes. My mom began chemotherapy later that month, which continued for six months. Because of the way the chemotherapy affected her body, I wanted nothing more than for her to have a better form of treatment.

 Chemotherapy is one of the most common forms of treatments used today because it is able to target the fast growing cancerous cells and attacks the cells as they are going through the cell cycle (American Cancer Society 2019). However, Yale Medicine (2022) points out how the chemotherapy does not know which of the fast growing cells are actually cancerous, which is why patients going through treatment tend to have hair loss, sores in the mouth, and nausea as the cells in their intestines, mouth, hair, and nails are affected the most.

 Chemotherapy has had similar effects on each of my family members who have been diagnosed. All four lost their hair, had a loss of appetite, and other changes to their appearance that were strikingly different from what they had looked like before treatment. As a 10 year old, it was truly horrifying to watch my mother almost shrink in front of me. I watched as my mother’s hair began to disappear from her head as it randomly fell out throughout the weeks of treatment. She would tell me how she was amazed at the amount of hair that was left intertwined in her fingers after washing it. Weeks later, on one of the last few warm weekends of the year, my mom made the decision to shave her head completely. I knew this moment was emotional for her, but she sat on our back deck, laughing and joking with my brother, my dad, and I as my dad removed the last pieces of hair from her head. She wore head scarves for almost a year as she waited for her hair to grow back.

Almost once a week, we would paint our finger and toe nails together so she could cover the effects that the chemotherapy left. She would sleep more, get sick easily, and eat less after treatments. During treatments, from both chemotherapy and surgery, my mom lost parts of herself that made her feel more feminine, such as her hair. It was difficult to be a young girl and watch the person you admire most go through such drastic changes.

In the winter, I was scared to be around her because everyone at school was sick and I didn’t want to be the one to make her sicker than she already was. I would help my dad cook dinner on nights my mom had treatment so she could rest. When she had surgeries, I would lay in bed with her and bring her anything she needed. For months, I helped take care of my mom as she had done for me while I was growing up.

Alongside chemotherapy, all four members of my family had surgery and my mother had radiation. While these treatments were not easy to watch my family go through, nothing compared to chemotherapy.

 Because the side effects of chemotherapy are extremely damaging to the body, researchers have begun studying targeted cell therapy as an alternative that would be less harmful to the body throughout treatment. The Cleveland Clinic (2022), a top hospital in the United States, explained that targeted cell therapy works by identifying the type of genetic mutation and choosing the target on the surface of the cell to attack. Researchers from India and Finland have observed how targeted cell therapy increases the killing effect of the treatment while decreasing the amount and severity of the side effects (Raj et al. 2019). Targeted therapy is different from chemotherapy in the way that it can be used to help the body recover instead of continuing to destroy the cells. According to research done by the molecular researchers of the University Sains Malaysia, targeted therapy can activate the immune system so the noncancerous cells have a chance to regrow (Lee et al. 2018).

 When my mom got better and completely finished her treatments, it was the most relaxed I had been in years. I had been naive enough to think that my mother would be the only one who would ever get diagnosed, but I was wrong. Only four years after my mom was diagnosed, my grandma announced at mine and my grandpa’s joint birthday party that she had been diagnosed with ovarian cancer. Once again, my world seemed to stop as I held the tears in at the family dinner table.

 My grandmother began chemotherapy and when I would call her, she said that it made her so sick that she would wake up in the middle of the night and wouldn’t be able to fall back asleep. She learned to keep peanut butter on some crackers for those moments, but it was only temporary relief from the symptoms she was feeling. Since she was older, the effects seemed to take a greater toll than they did on my mom, which surprised me because I thought I had already seen the worse.

 At the University Sains Malaysia, researchers have been working on targeted cell therapy so the drugs only target the cancerous cells and leave the healthy ones alone (Lee et al. 2018). Additionally, they have found that these targets are able to trigger the immune system so the body itself can start fighting against the cancer. This allows the cells in the intestines, stomach, hair, and nails to grow as they normally would and minimize any side effects, a benefit I wish my family members could have had.

 My grandma was done with all of her treatments in a little under one year after she had told us at the dinner table. But right as she got better, my grandpa found out he had stage 4 pancreatic cancer. If you didn’t already know, pancreatic cancer is one of the hardest cancers to treat, especially at stage 4. I’ve had to come to terms with the fact that chemotherapy would only be used to prolong his life, not make him cancer free.

 Due to the struggles that doctors have found when treating tumors in the brain or the pancreas, researchers from the department of translational medicine from Zhengzhou University have been focusing on those cancers (Zhao et al. 2023). They have developed a new type of targeted therapy called nanoparticles. These nanoparticles are small enough that they can be used in treatment for brain cancer because the surrounding tissue won’t be affected. These nanoparticles can be used for many types of more aggressive cancer and are being developed.

 It’s difficult for me to know that the research is being done everyday and will someday be able to help millions of people and families because they will have more hope for survival than my grandpa does now, but my family is not in that situation. My grandpa, who is regarded as the most intimidating man in our family, used to be a 6’4” hunter who had a loud booming voice that could be heard from anywhere. Now, he has lost most of his body weight and his voice has been reduced to a little more than a whisper because of the tumor that has grown in his throat. He naps throughout our family dinners because his body is exhausted, and he’s always curled up under a blanket because he can’t seem to warm up. My grandpa’s transformation has been the most salient, because although my mom, grandma, and uncle went through similar changes, none of them were as severe as his.

 So now my family watches as my grandpa slowly withers in his blue leather chair from the constant treatment that is both destroying and saving him. The question of quantity over quality has become the new focus. If it was only a couple years from now, we could be having a different conversation. I am hopeful for families that will be in a similar situation to mine years from now, that there won’t be the impending doom of a diagnosis. While no cancer treatment is easy on the body, targeted cell therapy can give patients a chance at a life after treatment.

 Timothy Hoffman, a student researcher at the University of Colorado, Boulder shared his hope for targeted cell therapy. “People shouldn’t get too excited to not see chemo, we are still going to use chemo for quite some time because it is very good at attacking specific types of cancers, specifically blood type cancers. But targeted therapy offers a much more curative promise.” He goes on to say that a combination of surgery and targeted therapy is one of the most effective strategies for patients. Hoffman wants people who are following the development of these therapies to understand that it is an extremely difficult area of research but scientists are actively working to implement targeted therapies into treatments for patients. “It’s hard to tell people battling cancer to be patient. Just don’t worry, we are working on this” (Mohlenkamp and Hoffman 2023).

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