



A Ticking Time Bomb

“A few years ago at age 76, my father had surgery to replace each of his failing knees – one six months after the other. His lifestyle as a retired college professor and author does not demand Herculean knees; however, pain-free mobility was his simple, quality-of-life objective. We had done a good deal of reading about medical device implants and knew that artificial knees and hips have come a long way in the last 20 years. But one side effect we weren’t prepared for was the risk that an infection at the site of the implant could surface long after the surgery was over.

Dad’s first implant was problem-free. Because the surgery and recovery went so well, I think we let our guard down about the potential for complications when non-biological medical devices are implanted in the body.

The second knee surgery also seemed to go well, but 1 ½ years later, Dad’s knee began to swell significantly. After taking a culture of the grey, cloudy fluid from his knee, his surgeon explained that a serious infection had developed at the site where the implant interfaced with his body. This was a dangerous, potentially life-threatening situation requiring immediate intervention, but neither medical option was particularly pleasant for my father: take the knee out for two weeks and replace it with a “spacer,” which is surrounded with an antibiotic-exuding gel pad, or cut open the knee, scrape the infection off, clean it and irrigate it, and sew it back up. Either way, both options meant months of strenuous, painful physical therapy afterward. Once the surgeon opened up the knee to view the extent of the infection, he made the decision to go with option two.

While this surgery averted an immediate crisis, Dad’s problems were not over. Every few months, his knee swells and he returns to the hospital for tests hoping the infection hasn’t returned.

If my father had had access to the Semprus Surfaces technology at the time of his original surgeries, we wouldn’t be going back and forth to the doctor every two months. We knew there were risks associated with medical device failures, but we didn’t realize dangerous infections could develop 1 ½ years after the implantation. What we learned is that anytime you have a medical device placed in your body, this can happen. It’s like a ticking time bomb inside your body.

In some ways, it’s like having cancer; it can always come back.”

--Ethan C., Boston, MA