



Room for a view

The impact of a split-second error

My first medical school elective was spent in a publicly funded hospital in Cape Town. I expected to get lots of hands-on experience in South Africa and to return a little wiser and more knowledgeable. I didn't know that the experience would lead me to question my beliefs, my strength and my desire to succeed. This unforeseen part of my training began with a split-second error on my last night shift.

I was injecting anesthetic into a knife wound on the back of a young man, and I misjudged the position of my left hand. The needle slipped through my glove and punctured my palm before I realized what was happening. I quickly removed the glove, washed my palm with soap and water, and squeezed as much blood out as possible. It works with snake bites, doesn't it? I told the resident what had happened. He shrugged and advised me to get a blood test in a few months, so I continued with the work until my shift was over. The next morning, I left for a two-week vacation and tried to forget all about it.

Until, back in Canada, I contacted the student health services at my university. After ten minutes of questioning by the doctor my complacency evaporated. I felt foolish, incompetent and concerned. Just about the only thing I'd done right was to wear gloves. I hadn't washed the area with iodine, I hadn't screened the patient for HIV (in a hospital with a 30% infection rate among patients), and I hadn't taken prophylactic AZT within 72 hours of the exposure.

The doctor gave a sympathetic, almost pitying sigh and said I would need to be screened for hepatitis and HIV at three and six months. She pointed out that I would no longer be eligible for disability or life insurance if the results were positive. Fortunately, I was one of the few in my class who had acquired insurance before my elective — thinking not of needlestick injury but of the

possibility of being in an accident while I was travelling.

So let's talk statistics. Chances were less than one in three that the patient was infected. Current literature indicates that health care workers who sustain a percutaneous injury with a needle contaminated with HIV have a 0.3% risk of seroconverting. I reassured myself that my chances of acquiring the infection were relatively slim. Even so, I began to notice how often we discussed HIV in class. I wondered how it would be possible for one of those microscopic retroviruses *not* to have entered my bloodstream if the needle were contaminated. I observed small children on the bus and wondered if I would ever have the opportunity to raise my own. And I wondered how often North American physicians stick themselves with needles.

As the three-month mark approached, I started to imagine I had some of the early symptoms of HIV. I confided in a few close friends, but in light of the stats, most of them blew it off. I'm sure I would have too, in their place. I didn't tell my family. I began to have difficulty concentrating in class, pondering the new direction my life would take once the results came back. Then I wrote out a five-year life plan so that I would be prepared for the worst-case scenario. I sought out articles on current HIV treatments, and I spent more time than usual jogging or using the stairmaster, trying to maintain some semblance of sanity.

The day of the test results arrived, and I asked my best friend to accompany me to the doctor's office. After a harrowing wait, I was ushered into a small examining room. My doctor wasted no time in telling me that the test results were negative. She gave a

little smile and acknowledged that I had probably been under more stress than usual. A huge understatement. She showed me the official laboratory report, and that was it. Done. I walked home with my friend, met up with two classmates, and we all went out to celebrate. I have since been cleared at both the six-month and one-year marks. This has been the toughest part of medical school so far. I have never felt so isolated from my classmates or questioned so many aspects of my life.

Some time later I was asked to speak to first-year medical students about needlestick injuries. I gave them the following advice: If it happens to you, don't feel embarrassed or alone. Know that you're one of many and do whatever is necessary to reduce your risk of occupational transmission of hepatitis or HIV. Seek some reassurance in the low incidence of HIV seroconversion among those who have stuck themselves with a contaminated needle. And live your life.

Many of my friends and family have asked me if my adventure in South Africa was worth the surreal angst I wrestled with for a year. It most certainly was. There are many things I would have done differently with respect to the needlestick incident. But I have no intention of curtailing my professional dreams for fear of occupational HIV exposure. My beliefs have been restored, my courage has been renewed, and my desire to succeed has been strengthened.

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The University of Calgary has since instituted formal lectures on needlestick injuries for first-year medical students.

