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Editorial

A Long Call Home: General Surgery Residency and Burnout

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Editorial

What are these strange alpha-synuclein and neurofibrillary tangle stuff? I thought only the elderly were afflicted by such things. Yet here am I, in my thirties, trying to comprehend an article about brain function and sleep deprivation [1]. Am I struggling because it's starting? As a junior resident doctor in General Surgery I remember working for 30 hours non-stop. The article told me that evil humors (like this sin-stuff and tangles) are flushed out of the brain via the lymphatics surrounding my dendrites - and work best when I am asleep. It seems they clear waste products and prune unwanted synapses. But do I want my brain pruned like my Dad prunes his apple trees? Surely I need all my neurons intact if I am to finish this bowel anastomosis. An intense, sudden doubt grips my own guts. Did I set the stapler right?

I have always wanted to be a surgeon. The years of residency taught that it requires dedication, complex technical skills and a nuanced understanding of health and disease. Above all, it calls for teamwork. It calls on the skills of many disciplines, each committed to the highest standards of integrity and competence. That's what the public expects of us - this is the social contract into which we in the medical profession have entered [2]. However, competence in the deployment of complex skills presupposes or presumes adequate sleep and a clear sensorium, thus helping me to fulfill my duty conscientiously and competently. So, are those neurofibrillary tangles real or only imagined by my sleepily pruned neurons? Are my judgment, my temper, my equilibrium and my coordination still flawless?

I recall one harsh junior resident call during a particularly busy shift. I rounded alone as the seniors were away on their academic half day. Interrupting rounds, a code blue was called. I immediately helped with an unsuccessful CPR. Rounds continued; then to the operating room. Lunch was a brief and Spartan affair; no time to sit and luxuriate. The day's discharges were completed, family members provided with updates, and my patient's pain reassessed and treated. The routine day was coming to an end. As I was on solo call that night I received handover from the other teams. One senior resident asked me to: "Have a look at a consult, nothing urgent". As the night progressed the consults continued to roll in from the emergency room until dawn finally broke, bringing a sense of relief and numbed delight that nothing major had gone wrong. I desperately wanted to rest my head for a few minutes but I still needed to finish dictating the night cases, add the new patients to the list, and create a handover document. At 6 am, these tasks were complete and I was ready to round. At which point my stomach once more contracts: I've forgotten to review the consult which was handed over to me by my senior resident. I find him and inform him that I will complete the consult now, and that the patient had been seen but not formally reviewed with the staff surgeon. His rebuke cuts deep: "How could you be so irresponsible?! Your behavior is below-par. This would never have happened at another site".

Was this evidence of neurofibrillary tangles, sin-nuclein toxicity in my colleague? Was his brain also suffering from sleep deprivation-induced oxidative stress or was it simply a display of surgical machismo and a hurtful lack of empathy? Was his blood-brain barrier suffering? I found myself wondering what was going through my senior's mind at that time, causing him to deliver such a humiliating dressing down. Either way, it hurt and felt desperately unfair.

As time passed, I experienced more of these situations. I noticed, too, that other surgical residents had similar experiences and that they also felt something in their training was lacking. Most staff surgeons showed a genuine interest in my colleagues and my own personal and surgical development. However, the variation in staff call-schedules, coupled with the frequent changing of residents to new hospitals and new rotations, precluded any long-term development of these potentially very important relationships. I began to notice that that my own personal life was suffering. How, I wondered, with my supportive background, family and friends could I be brought to feel this way. My natural sense of optimism and enthusiasm for the job was draining away.

Yet still, I needed to persevere. This is my chosen profession; there was no other option, no matter how exhausted or disillusioned - burnt out - I felt.

Burnout is a complex of emotional and physical exhaustion, feelings of depersonalization, and loss of any sense of personal accomplishment, specifically in relation to one's professional activity [3]. Was this what I was experiencing, I wondered? I had certainly lost my appetite for life and my joie-de-vivre, despite living in a prosperous Western democracy, enjoying a privileged lifestyle. Canada regularly features as one of the most desirable countries to live in. So I was shocked to discover that over 50% of Canadian and American doctors experience burnout [4,5] - and that residents suffer

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the highest of all incidence of burnout, approaching rates of 75% [6,7]. Furthermore, doctors experience some of the highest levels of loneliness, contributing to increased risks of cardiovascular disease, depression and dementia [8]. Worst still are the appalling and tragic rates of suicide among physicians, the highest of all professional groups [9]. By any standard, this dreadful record should be high on Canada's medical agenda. This sorry record is emblematic of heart ache, anguish and despair.

As for surgical residents like myself, what we most urgently need to ease the pressures is someone to act as a collegial, experienced advisor, to help us negotiate these deep and sometimes dangerous waters. Is it too obvious to point out that we are human and prone to err - errors that with the help of an experienced mentor might be avoided, or rapidly incorporated in improved understanding? To my mind, a system of mentorship would greatly enrich not only the resident experience in General Surgery, but also the wider surgical community as a whole. And it would almost certainly make for a better health service, too.

Such mentorship programs, designed to support and assist already exist, and have important implications for both mentees and the mentors themselves. In one Canadian surgical residency program [10], significant benefits resulted from a formal mentorship program - not the least of which was improved collegiality among the residents, a better work-life balance and increased self-confidence. Equally, the mentors felt a positive impact on their own lives, in part by allowing for a reflection of their own practices [10]. There would appear to be a great incentive, therefore, to extend the mentorship system to all surgical programs across Canada. I cannot think of a better investment.

So, where do we go from here?

Perhaps another way to describe a mentorship program would be as a partnership between colleagues. As each resident progress through the program, an experienced advisor would be available to address important events which have occurred throughout a given time. In turn, this resident would become a mentor (partner) to both peer-residents and medical students. This would create a community of professional learners working together to establish a supportive culture. Consequently, the climate in the working environment would promote effective leadership and guidance in critical areas such as life-work balance, personal sacrifice, emotional intelligence, and resilience. The truth is that we learn greatly from our mistakes: a scary thought for patients. However, an effective mentorship program would make sure we truly reflect dialogue and learn from any error. Both mentor and mentee would greatly benefit, and the pressures of the job, I believe, would be mitigated.

Situations similar to my experience with my senior resident are not uncommon. Imagine the profound teachable moment that could have occurred with respectful, effective feedback, resulting in personal reflection and growth on this matter? Such an outcome would positively affect the whole team in addition to untangling those neurons, while cementing more bonded teamwork, building a better blood brain barrier and reducing the risk of burnout. Maintaining the highest standards in the medical profession and working effectively with our colleagues requires purposeful attention and ongoing collaboration - with the support of a surgical mentorship program we can address the urgent priority of burnout. As a highly privileged profession this would also help send a message to the world that collaboration and teamwork are central to health.

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