



## Being a Neurosurgery Specialist and a Resident

"Beyin ve Sinir Cerrahisi" Asistanı ve Uzmanı Olmak

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## SOCIAL STRUCTURE

It is pleasant to start working early in the morning. Shaving, having breakfast, taking the ride to work with the first glimmers of sunlight. I was never able to get to work in the morning back when I was a resident. Getting to work at the crack of dawn meant going to work during the night. There were only street dogs foraging garbage or paper boys awake at the same time. I can't say this habit was totally useless. Waking up early protected a neurosurgery resident because it meant less risk of a traffic accident.

Catching a glimpse of sunlight during the short weekend days of the winter meant a whole lot more when I was a resident – I was able to appreciate the little pleasures life had to offer. Being anti-social is an inevitable part of your residency. Having a shift every other day meant sleeping the evening you were home. In fact, most of us end up finding a 6- or 7-year-old child sitting on our lap without remembering when they grew up. Many of us struggle to keep family ties close and strong during these times. I can't think of a colleague who was present for his child's birth. Remembering birthdays, taking a stroll without a worry in your mind or ever thinking of a better life – luxuries a neurosurgery resident cannot afford.

Habits picked up during the 6 or 7 years of residency may last a lifetime and may mould the neurosurgeon you are today. The neurosurgeon who likes to stay awake all night working, getting up early in the morning to go to work, not having time for any hobbies and losing all interest in the arts, literature and travel, having neurosurgery as the sole pleasure source of life, having no friends but neurosurgeons and talking only about previous or ongoing patient experiences with those friends - or more often about how the surgeon performed during surgery, leaving 8 hours for sleep and family, ends up with no life outside the hospital or clinic. In order to fit into this mould one must abandon social life during residency. Having a shift every other day means you should read, travel, and have a social life on the evening you are off. It is easy to create the person mentioned above but impossible to change him back to what he was before the experience.

## **PHYSICAL CONDITION and DISEASES**

The physical work required by the profession is the easiest to get used to. Sleep deprivation, hunger (or eating something

you don't know), constantly being on the run or constantly staying still for long periods do not take too long to get used to. Suddenly you are no longer able to stay in one place for more than a moment. The diagnosis of Restless Leg Syndrome is a perfect synonym for a neurosurgery resident. A resident evolves just as Darwin mentions, and becomes a Restless Person. Things a normal person would do with a normal rhythm, dining with family, taking a relaxing stroll in the park - becomes a race for a neurosurgeon. I still can't beat the habit of gobbling my food. My wife continues to warn me `honey, all the food on your plate is yours, no need to rush` but what's the use. The years of eating as fast as you can and being ready for an emergency stick with you long after your residency. The main principle here is to move from a labile position to a stable position as quick as you can. Hunger is a labile condition; you quickly relieve your hunger, stabilize your condition and wait for the next hunger crisis. This explains the many gastrointestinal symptoms suffered by neurosurgeons today - indigestion, dyspepsia, reflux etc. The stress that accompanies the profession makes upper gastrointestinal hemorrhages a common entity among neurosurgeons.

Stress is the basis of neurosurgery. What makes this job fun is the emotions that lie behind it. The taste of danger not pleasure. The constant feeling of uneasiness, a completely spontaneous situation, open to every possibility you can think of, living on the line, not being able to see or imagine what lies moments ahead of you are what keeps the adrenaline pumping through your veins. Your stress and your anxiety feed on your fears, on your professional capacity. Every time you evaluate a patient, solve a problem of life and death that may seem ordinary during surgery, ponder whether the operation you just completed was adequate, decide on whether to continue or stop, and suffer the anxious moments of the concluding parts of surgery that become a mountain of stress, you are on your way to developing the paranoid obsession that all neurosurgeons experience. The operation ends with the skin sutures but the liability that comes with the patient does not end there. You may think you performed brilliant aneurysm, skull base or odontoid fracture surgery but that is only one problem removed from that mountain of stress. Complications such as vasospasm, infection, and meningitis will keep you awake all night! Psychiatrists define stress as the desire to further improve life quality but this is only their perspective. You fill a cup of coffee and you `evaluate` a patient – taking into account every possible scenario imaginable before, during and after the surgery – but things are quite different if you are living inside that mountain of stress. Is it not uncommon to see a colleague without a history of GIS hemorrhage, hypertension, myocardial infarcts, and coronary bypass surgery?

Close contact with all kinds of body fluid or waste imaginable is also something you get used to quickly. Your olfactory nerve especially gets worked up. I am sure that the unique smell that comes with the intensive care unit improves your limbic lobe. Thus the functions performed by the limbic lobe overcome the remaining functions of the cerebrum. Even with the declining rates, you can't help feeling like a lab rat surrounded by biological and chemical warfare. The hepatitis viruses are your best friends – not something you may desire but nonstop interaction lies on the base of this friendship. You may find yourself so worked up that rules of hygiene and sterility degrade to Plan B when protecting yourself. It is not rare to find that you have yourself become a carrier for Hepatitis B – a nuisance illness that sneaks up on you at a most unexpected moment and causes serious morbidity and sometimes mortality.

Another aspect of neurosurgery that is surely inevitable is the nuclear war. Not with warheads but with the accumulative amount of radiation the residents were exposed to during my time. Percutaneous angiography and myelography were commonly performed by residents but have now been mostly handed over to the radiology department. However, we still continue to receive massive amounts of radiation through intraoperative fluoroscopy. One wonder whether this is associated with the increased rate of leukemia and other malignancies amongst neurosurgeons? Do we stop and take precautions? Usually not. What concerns us more is whether we get the job done on time, finish the operation swiftly, have the next patient on the operating table as soon possible, work day and night – we usually don't spend much time wearing a lead apron or neck collar or just staying away from the source. `We'll be fine` is the most common slogan you'll come across in the operating room. Those who try to protect themselves from radiation are usually mocked by colleagues as if they

were afraid of a small puppy. The results of the `How do you protect yourself from radiation` survey conducted by the Turkish Neurosurgical Society are worrisome.

So why do people choose to go through the vigorous gauntlet that is the neurosurgery residency after they have already gone through the long journey of medical school? Everyone has his/her own reason. The most common ones according to my perspective are neuroanatomy is the most enjoyable anatomy, neurosurgery is the most exciting and amusing surgery, and neurosurgeons are always the most charismatic surgeons. Performing on a human brain and getting paid to do so? What more can a surgeon want? Clipping an aneurysm after carefully analyzing its preoperative digital subtraction angiography, emptying a critically located meningioma using an ultrasonic aspirator without disturbing the neighboring parenchyma, or extracting a large herniated disc fragment as a whole: what can make a man more content I can't imagine. But I also pause to think whether this delight is normal or pathological? One may find our ways of happiness bizarre but after all this is neurosurgery. Every medical field has their own patient population with chronic, acute, curable or deadly disorders and diseases. But where does one find a population of patients who plays Russian roulette at the operating table? Aren't most of our patients at the brink of death while they are just sitting in front of us at the clinic? Even if you're not behind the operating table clipping that aneurysm at its neck just like catching a criminal behind its back and bringing it to justice with all its glamour - just watching the operation is like witnessing a piece of art being created.

I know colleagues who are reading this script have experienced similar situations. Some have left their residency years behind a while ago, whereas some are approaching their retirement. Time heals all our wounds with time but we still remember the patients we've lost rather than the ones we've saved. Life goes on, with or without lives being lost but the profession of neurosurgery gives our kind a chance to taste the happiness that comes after realizing how easy it is to die.

With all the pain and joy it has given me and thanks to all my mentors, students, and colleagues, I love my job and I enjoy what I do. How Happy I am to Say That I am a Neurosurgeon!