

A Day in the Life of a Neurosurgeon

Volker K. H. Sonntag, MD

Phoenix, Arizona

It is 6:45 a.m. and I am in my car heading to the hospital. The sun is just rising behind me in the east; another day has begun in the desert. It is the first Tuesday of the month, and we have our monthly morbidity-mortality rounds with the entire neurosurgical team (medical students, residents, fellows, observers, and fellow attendings). For the next 2 hours, the cases from the previous month that were difficult or associated with complications are reviewed. Typically, six to 10 cases are discussed. This conference is always an excellent learning experience for all of us.

At 9:00 a.m., I begin patient rounds with residents, fellows, and observers—the “spine team.” The 14-year-old on the pediatric floor who had an occipitocervical fusion last Friday is ready to go home. We discuss what he can and cannot do, follow-up appointments, and medications in detail with the young man and his family.

Next, we check on the patient in the adult intensive care unit (ICU) who underwent decompression and fusion for a T12 fracture. Gratifyingly, his leg movement has improved almost daily since his surgery 5 days ago. We visit two more patients in the ICU and then go to the ward floor where a 20-year-old man who had undergone a microdiscectomy and a 45-year-old woman who had undergone a corpectomy for an ossified posterior longitudinal ligament are discharged. We visit several more patients who are recovering from surgery and who should be discharged home or to the rehabilitation floor within the next 1 or 2 days.

Now to the operating room (OR). Three cases are on my schedule. The first patient has an intramedullary spinal cord tumor. After he is intubated, he is placed in a prone position and his head is fixated in a Mayfield headrest (Codman, Inc., Raynham, MA). We perform a cervical laminoplasty and then a cordotomy under the microscope. The tumor is identified. Before surgery, we had thought it was either an astrocytoma or ependymoma, but luck is with us. The tumor forms a decent plane relative to the spinal cord, and frozen biopsy verifies the results: ependymoma. After 3 hours of careful dissection by the surgical team, which includes myself, a resident, and a fellow, the 2-cm intramedullary tumor is removed.

In the recovery room, the patient's leg weakness is worse than before surgery but his arm functions are normal. We discuss the findings and the patient's postoperative examination with his family. *Yes, the tumor was all removed and the prognosis is good. The increased weakness in his legs after this type of surgery is common and he should recover.* Relief, hope, and love wash the faces of his wife and family.

We are ready for the next case, but the OR will not be ready for another half hour, so I return to my office to call patients and colleagues. *Yes, we will be happy to accept a transfer patient from Yuma:* a 22-year-old male with a C2 fracture sustained in an accident while riding an all-terrain vehicle. I emphasize to the referring physician that the patient should be transferred in an external orthosis.

My secretary reminds me that the patient who called yesterday with neck and arm pain is waiting in the examination room. Monday and Wednesday are my office days, but I also see patients on "surgery days" (Tuesday, Thursday, Friday) when emergencies or problems arise. This patient has a large herniated nucleus pulposus at C6-C7 that is severely compromising the nerve root on the left and slightly indenting the left anterior aspect of the spinal cord. He has

been suffering from this pain for 4 weeks and is desperate. After the consultation, the patient is admitted and scheduled for surgery the next day after clinic.

Back to the OR where the resident has already positioned the next patient, a 25-year-old man with back pain and bilateral leg pain with a grade 2 L5-S1 slip that is refractory to nonsurgical treatment. We proceed with an L5 laminectomy, pedicle-rod fixation of L5-S1, and fusion of the lateral transverse process. A dural tear is repaired with 4-0 nurolon sutures (Ethicon, Johnson & Johnson Professionals, Inc., Somerville, NJ). In the recovery room, his neurological examination is normal as it was before surgery. His postoperative radiographs look good. His young wife is waiting. *Yes, everything went well. Here are the x-rays; you can see the screws, rods, and bone.* She will wait for him in his room after she calls his parents. She hurries to a phone.

The next case is ready in another operating room, where we now proceed. We perform an anterior cervical discectomy with an allograft fusion in a 60-year-old woman who was symptomatic with myeloradiculopathy. Fortunately, her surgery goes well. I call her husband at home to let him know that she is in the recovery room and recovering from the surgery.

To the office. More phone calls. I read the day's mail. I review and answer my e-mail messages. I discuss an upcoming meeting with my secretary, and we sort out the details. I read two manuscript reviews prepared by the Neuroscience Publications Office for the final time and approve them for submission. It is 6:00 p.m. and the spine team is paged for postoperative rounds.

We see the three patients operated on that day and record the results of their examinations in their charts. The nurse alerts us that the tumor patient who had undergone the cervical

laminoplasty has drainage on his dressing, and we change it. The wound looks good. It is time to go home—a good time since rush hour is almost over.

On the road toward home, the sun is now behind me, setting over the desert mountains in the West, and scenic Camelback Mountain towers over the valley in front of me.

Over dinner, Stephen, our 8-year-old, relates his day at school. One of his classmates fell and needed some stitches on his forehead. Our quiet 17-year-old, Christopher, states that he has two tests the next day; we give him encouraging words. He says he needs to study a lot tonight. My wife Lynne has also had a busy day, playing tennis (she won), helping in Stephen's classroom, and running the household. It is 7:30 p.m. I wonder if the C2 fracture patient from Yuma will need surgery. We will examine him and review his films tomorrow.

Neurosurgery deals with abnormalities of the brain, spinal cord, peripheral nerves, and its supporting structures. I primarily care for patients with spinal disorders and sometimes wonder if it is worth it given the other tedious, even painful problems that I must unavoidably deal with: managed care, administration, and socioeconomic and medicolegal issues. Then I remember the wife of the patient with the cervical ependymoma—her thankful, relieved expression and the resident's smile when the patient moved his legs in the recovery room.

It is 6:40 a.m. and the sun is rising behind me. I am driving to the hospital.