



Training in rural surgery: A resident's perspective

by Garrett R. Vangelisti, MD, Portland, OR

I have now completed the first six months of what may prove to be the best year of my residency experience. I am a fourth-year general surgery resident at the Oregon Health & Science University (OHSU), Portland. As the first general surgery resident to matriculate into the university's rural surgery training program (RSTP), I have had the privilege of participating in the development of its curriculum and of catching a glimpse of the realities associated with a rural surgical practice. The purpose of this program is described in the article on page 13 by John G. Hunter, MD, FACS.

Program design

Traditionally, clinical rotations in general surgery have included obstetrics/gynecology, otolaryngology, orthopaedics, urology, endoscopy, and general surgery. These rotations in the RSTP differ significantly from what first- or second-year residents experience in most general surgery train-

ing programs. In the university or community-based "junior" subspecialty rotations, general surgery residents rarely serve as the operating surgeon. The procedures performed are usually involved in the management of complex cases that have been referred by smaller hospitals, and the objective of these rotations is to provide exposure, not to promote competence.

The objective of the "senior" rotations in surgical specialties as part of the RSTP is to attain competence in the management of the type of cases that might be encountered in a rural practice far from a referral hospital. Essentially, it is designed to train the resident in surgical primary care. One of the unique challenges facing such a broadly trained surgeon is determining which cases they must do (emergencies), which cases they should do (common elective procedures), and which cases should be referred (rare procedures in complex patients). For example, patients with acute testicular torsion, active labor with fetal distress, or a peritonsillar abscess all represent surgical emergencies that should be treated without delay.

Carpal tunnel syndrome, however, represents a clinical problem that is not a surgical emergency yet may have serious consequences if neglected. A

Above: Three Rivers Community Hospital, Grants Pass, OR.

general surgeon with adequate training and experience in performing this operation may manage such a patient in a rural setting, thereby sparing the patient the inconvenience of traveling long distances to a higher acuity facility. A general surgeon equipped with the knowledge and technical skills to manage basic surgical problems in the subspecialties is of great value to the rural communities. If my first six months of the rural surgery training program is any measure, I feel confident that I will be able to manage many of the basic surgical problems of obstetric, gynecologic, orthopaedic, urologic, and otolaryngologic surgery.

Brodeur's Experience

During my obstetrics/gynecology rotation I learned about the management of ovarian masses, ectopic pregnancies, tubo-ovarian abscesses, pelvic inflammatory disease, and much more. My operative log grew thicker as I performed hysterectomies, emergent and elective cesarean sections, laparoscopic tubal ligations and oophorectomies, and dilation and curettage for diagnostic and therapeutic purposes. The orthopaedic rotation provided the opportunity to perform closed reductions of many types of fractures, the evaluation and management of patients with median and ulnar nerve compression syndromes, flexor and extensor tendon repairs of the hand, and the reduction of joint dislocations.

While on the otolaryngology service, I learned how to perform the incision and drainage of peritonsillar, submandibular, and deep neck abscesses. I gained experience in the basics of facial plastics, which proves useful during the excision of facial skin tumors or traumatic facial lacerations.

The urology experience exposed me to the evaluation and management of nephrolithiasis, blad-



Dr. Vangelisti (right) performs an endoscopic carpal tunnel release under the supervision of orthopaedic surgeon David M. Appleby, MD, FACS.

der and prostate cancer, and, of course, the difficult Foley catheterization. The operative log continued to grow with the addition of orchiectomies, vasectomies, and the surgical reduction of testicular torsion. Many of these opportunities are not available to general surgery residents at OHSU due to the presence of the many individuals training in the respective specialties.

I must emphasize that I have not simply been “programmed” in the technical aspects of these problems. For example, the technical skill of pinning a hip fracture is necessary but insufficient to care for patients with hip injuries. Some hip fractures require a hemiarthroplasty or dynamic hip screw rather than pinning.

The success of the RSTP and those individuals who complete it will not be measured by the size of the operative log alone. A thorough understanding of the pathophysiology of the disease process is of equal importance. This can only be achieved

through supervised evaluation of patients in the outpatient clinic, pre- and postoperatively, and in the emergency department setting.

Rural life

In addition to the broad surgical training, I experienced a glimpse of life in a rural community. Despite a population of 23,000, everybody knows everybody in Grants Pass, OR. A trip to the supermarket is incomplete without hearing, “Hello Dr. Vangelisti,” from a patient, colleague, or both. A night on call can range from a simple page about an antiemetic or the emergency room physician calling you at home to discuss the two patients in the ER with stab wounds to the abdomen.

The Phantom of the Opera does not come to town much, and I have noticed the absence of a Starbucks on every street corner. However there is certainly much to enjoy. The world’s largest Chinook salmon ever caught with a fly rod was pulled from the Rogue River this year, and the steelhead aren’t too shabby either. This is one of three rivers within minutes of town, thus the name “Three Rivers Community Hospital.” Despite the many hours dedicated to reducing fractures, delivering babies, and pinning hips, I have found time to go fishing, hiking, and enjoy the scenic white water of the Rogue River with my wife and son.

Conclusion

So, whether my career leads me down the highways of academics or the back roads of rural Oregon, I believe this may prove to be the best year of my residency training. As the first resident at OHSU to embark on such an endeavor, there are occasions when a fellow resident asks with skepticism about the relevance of such broad training. “Garrett, will you ever pin a hip, perform a cesarean section, or drain a deep neck abscess? Is this training truly relevant?” My answer usually draws from an experience I had in the past week.

A 29-year-old female presented to our level III trauma center/ER two days after a hard fall on water skis. The blast to her left side took her breath away and then some. She stayed at home on the couch and treated her pain with aspirin

and Vicodin. On arrival to the ER her abdomen was distended and diffusely painful. Her initial hematocrit was 22, and her systolic blood pressure was 80 with a pulse of 130. The nurse anesthetist and OR tech were called in from home and the patient was taken directly to the OR.

“Well did you take out the smashed spleen?” asked a fellow OHSU resident. No. David Oehling, MD, FACS, a general surgeon, and I removed the suspicious right ovarian cyst that had hemorrhaged over 1,000 cc into her abdomen. There was no need to call the gynecology service. This experience, like many others, demonstrates the value of the RSTP.

At many of the postgraduate general surgery training programs, I could probably log a handful of laparoscopic adrenalectomies, assist on several coronary artery bypass surgeries, and perform more laparoscopic cholecystectomies than I could count. It is very likely that many of the chief residents in general surgery will graduate this year without ever performing an oophorectomy.

It is for these reasons, and many more, that my year in the RSTP may be the most valuable portion of my general surgical training. I thank all of the people who have had the vision and enthusiasm to develop such a program, and I appreciate the opportunity to participate in its inception. □

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