GUEST EDITORIAL Pediatric urology: Then and now

Martin A. Koyle, MD, MSc

CUAJ Associate Editor; Division of Pediatric Urology, The Hospital for Sick Children and University of Toronto, Toronto, ON, Canada

Cite as: Can Urol Assoc J 2017;11(1-2):8-9. http://dx.doi.org/10.5489/cuaj.4416 am addicted to the HBO show, "The Knick." It is a medical drama that is surgically based, centred in a fictitious New York City Hospital at the turn of the 20th century. It's amazing to surmise how, at that time, with modern anesthesia and the newly discovered X-ray, doctors must have felt that they were "the state-of-the-art," and wondered how it could possibly get better in the future? We know that Halsted trained future surgeons at Hopkins as apprentices who learned mainly by spending long, celibate hours in the hospital observing surgery. Urology was an infant specialty at that time and was separated from its parent, general surgery, as a result of the invention of the cystoscope.

When I completed urology training in 1984, I chose pediatric urology and transplantation for subspecialty training and career because they were maximally invasive. In my general urology residency, I completed over 300 transurethral resections of the prostate (TURP), but only eight radical prostatectomies, while 28% of all cases I performed as chief resident, were open stone cases. With the discovery of cyclosporine, I realized that unless urologists became multiorgan transplant scientists, our role in this field would diminish in the future, concentrating thereafter on pediatric urology.

Within five years of my graduation from residency, virtually 100% of nephrolithiasis intervention had gone from open to either extracorporeal shockwave lithotripsy (ESWL) or endoscopic treatment. Benign prostatic hyperplasia (BPH) would become a more medically treated problem, whereas with the advent of prostate-specific antigen (PSA) and with Walsh's popularizing the nerve-sparing radical prostatectomy, that operation became the signature procedure for practitioners and trainees. Along came laparoscopy and robotics, and bang, a 1984 trainee like me, by virtue of "disruptive innovation," had become a dinosaur. Of course, since medical school, ethics, epidemiology/statistical tools, not to mention issues related to litigation and the influence of the web, cellular communication, picture archiving and communication system (PACS), and electronic health records have impacted medicine and learning almost on a daily basis.

The American Board of Urology (ABU) recognized pediatric urology as a subspecialty entity by offering its first-time limited (10 years) Certificate of Added Qualification (CAQ) in 2008. I have just recertified (after much worry, receiving the letter confirming this result has allowed me to sleep again) and, thus, have the meter running for another 10 years after the initial certificate expires in 2018. I don't plan to practice that long (as long as there is no major stock market correction... fingers crossed!!!). Am I still as competent as a general urologist, however? Very, very unlikely! In fact, given all that has changed, I think I might be an embarrassment to the specialty (and possibly a danger to society).

When I entered urology training, I had intensive (painful) general surgical training, having performed hundreds of hernias, probably 100 cholecystectomies (open, of course), and 30 or so colectomies, not to mention lots of vascular, trauma, and plastics experience. Most general surgical programs were highly selective, pyramid systems and the concept of a national "match" was just coming into play. I'm not suggesting it was right or better back then, especially after spending up to 140 hours a week in the hospital! However, by my third year in surgery, I felt comfortable managing most acute catastrophes and performing common operations independently. There were no fellows to compete with and we had much more independence in the operating room as we progressed in training, a far cry from Halstedian training (other than those crazy hours). I doubt, however, if I would have stood a chance of matching in urology today, given the quality of individuals whom I have had the honour of training over the past three decades. However, today's urology trainees have very little general surgical, open hands-on experience before entering urology and we, as educators, are expected to teach them these basic skills when they enter urology, often later (too late?) in their training years. Pediatric urology, for the most part, is still an open surgery-based subspecialty, and in many programs, there is limited rotation time for trainees to become competent and confident in performing even the most basic surgeries. Even in a tertiary centre like ours, the field has evolved from big-case surgery to more fundamental "twigs and berry" surgery, questioning the value of routine referral to centres such as ours by our patients, as well as by the government systems that fund us.

With competency-based training a reality, what will future trainees be expected to have competency in? Will they be able to really provide any basic pediatric urology care in their communities as a generalist and will those hospitals have the infrastructures to support such care? Given that a sizeable number of recent Canadian and American urology graduates seek fellowship training in a variety of subspecialties, will we need to structure such "fellowship" training differently, or devise Areas of Focused Competencies (AFCs) in Canada at least, in order to appropriately accommodate the needs of the community and those of the academic/tertiary care referral centres, while also satisfying the goals of each trainee? One size fits all doesn't cut it, and training will need to be tailored to the future urologist and the communities they serve.

The accompanying, invited commentaries, if anything, echo Montaigne's words: "There are no answers....only questions!"

Correspondence: Dr. Martin A. Koyle, Division of Pediatric Urology, The Hospital for Sick Children and University of Toronto, Toronto, ON, Canada; martin.koyle@sickkids.ca

NEW FEATURE!

CUAJ is now offering its readers the opportunity to claim Section 3 Self-Assessment credits of the Maintenance of Certification (MOC) Program!



Every second issue (February, April, June, August, October, and December), a specific paper will be accredited by the Canadian Urological Association (CUA).

CLAIM YOUR CREDITS IN 3 EASY STEPS:

- Go to www.cuaj.ca, read the accredited paper, and answer the three multiple choice questions associated with it.
- Enter your name and email to receive a certificate of participation from CUA.
- 3 Log the self-learning activity and record learning/outcomes in your Royal College MAINPORT account.



cuaj.ca