

---

# EDITORIAL

---

## Evolution or Revolution: Changes in the Approach to Urologic Care

Last December, my colleagues and I at the Humber River Regional Hospital in Toronto became the proud owners of the first “community-based” da Vinci robotic surgical system in Canada. This is truly an evolution in the way that we are now able to deliver care, especially to men suffering from prostate cancer. In most areas of the United States, standard open radical prostatectomy has almost been abandoned and replaced by robot-assisted laparoscopic radical prostatectomy (RALRP). In Canada, there are very few robotic systems other than in the major teaching centers. As we see in the article by Yuh and colleagues, the move from RALRP to robot-assisted partial nephrectomies was a natural evolution of the application of this revolutionary, minimally invasive technology.

The concept of minimal invasion I think is the natural evolution of the Hippocratic oath from “Doctor will do no harm” (which is impossible with radical surgery) to “Doctor will do less harm”.

We have just completed our 6 year anniversary in utilizing high-intensity focused ultrasound (HIFU) to perform outpatient, minimally invasive treatment of localized prostate cancer. There are many who still consider this a “revolution” because there was lack of long term (10 year) data before we began offering the procedure as a “mainstream” option. Others have become much more impressed with the safety and efficacy of the procedure after our group started performing it in Canada. It is still not approved by the US Food and Drug Administration.

The treatment of benign prostatic hyperplasia (BPH) has been the cornerstone of urologic care for more than 60 years. Over the years, the true innovation of the “transurethral approach” to benign prostatic enlargement has changed and saved countless lives and reduced morbidity in millions of men. It is interesting to see from the article by Lee and colleagues, which is based on a survey of American urologists, that even though we now have many other “safer and less invasive” energy-delivery systems and methods to debulk the prostate and perform “standard transurethral resection of the prostate (TURP)” (see the editorial comment by Hueber and Zorn), most survey respondents believed in performing traditional monopolar electrocautery TURP and still considered that this is the “gold standard.”

In a “revolutionary” article, I propose and describe a new technique: prostatic urethral separation using the UroLift system (Neotract Inc., Pleasanton, CA, USA). This technique does not even attempt to remove the bulky prostate, but rather deploys multiple transurethral stitches, under local anesthetic, to “pull the prostate open” and provide long term symptom relief with minimum morbidity.

Canter and colleagues report on their initial experience using the Olympus Button Electrode (Olympus, Southborough, MA, USA) for vaporization of bladder tumors. They report far fewer side effects and greater safety compared with the traditional approach, while still removing cancerous tissue.

The concern of failing to detect bladder tumors/carcinoma in situ (CIS) or providing incomplete resections is addressed in an article by Mark and colleagues. They describe the evolution of “blue light cystoscopy” utilizing a photosensitizing agent and the reasons for using this technique.

Rosenthal and DiTrollo present an “evolutionary” article on the “Evolve” Dual system (biolitic Inc., East Longmeadow, MA, USA). They describe the advantages and efficacy of this new laser fiber for the vaporization of the prostate in patients with BPH.

There have been and continue to be many technological and procedural changes to the management of urologic conditions. The rationale ranges from a desire to provide a less invasive, short-stay or outpatient procedure that will hopefully provide equal efficacy with less morbidity and fewer long term side effects, to a need to improve the efficacy of a standard diagnostic or therapeutic procedure, to a goal of lowering costs while still providing efficacious treatment.

An example of the latter is illustrated in the article by Sethukavalan and colleagues. They demonstrate significantly reduced patient costs by doing hypofractionated versus traditional fractionated external beam radiation.

Urology has “evolved” into a revolutionary specialty that can offer some patients the latest techniques performed with new devices. We need to determine if these new approaches should or could become readily available and easily taught so that they become the “new standards.”

However, we must never forget how we began, nor abandon our current skills. When we have a patient in front of us, we must continue to provide not just the science but also the art of medicine and/or surgery in the most appropriate manner for this patient, in this place, at this time.

*Jack Barkin, MD  
University of Toronto, Toronto, Ontario  
Executive Deputy Editor*