

Armen Aprikian, MD, FRCSC

*Interim Editor-in-Chief
CUAJ*

This issue of *CUAJ* presents 3 very interesting articles with very different technological approaches for treatment of prostate and kidney cancer. Each approach has very similar objectives: organ preservation, minimally invasive ablative therapy and less morbidity compared to standard therapies. The progress in percutaneous ablative measures for urological cancer treatment is excitingly rapid. It is clear that the future holds promise for such modalities and, in a relatively short period, many new modalities are now available for testing.

The 2 major impediments to most of these new approaches remain suboptimal real-time imaging and localization of cancers, and the lack of molecular imaging tools to visualize prognostic features. It would be unfortunate if ablative therapies, originally designed for entire organ ablation in situ (as for prostate cancer), were too quickly applied to focal therapy or “male lumpectomy” without proper assessment. Nevertheless, advances in imaging are progressing just as fast with the development of microscopic probes or tagged biomarkers to illuminate targets. A whole new field of molecular imaging is evolving and we need to be riding this wave. I am confident that the future is bright, with better and more precise imaging and prognostication leading the way for molecular surgery.

We look forward to follow-up reports from these authors on their experience in this exciting field. It is important that urologists maintain their leadership role in the growth of these image-guided therapies. Urologists should be involved in the development of imaging tools for cancer localization and treatment delivery, similar to our advocacy for the use of new systemic targeted therapies for urological cancers. It is clear that the urological surgeon of the not-too-distant future will be using a combination of targeted drugs, functional imaging and energy delivery systems much more than the DeBakey and Metz.

In my office, there is an oil painting hanging on the wall depicting surgeons performing open surgery. After admiring its artistic beauty, a patient wondered whether surgery was still being done this way. I haven't yet taken down the painting!