EDITORIAL

Codifying active surveillance

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Later in June many of us will be attending and celebrating the 70th Annual Meeting of the Canadian Urological Association (CUA) in Ottawa. Urology was first recognized as a subspecialty member of the Royal College of Physicians and Surgeons of Canada in 1937. However it was not until 1945 that the CUA was formerly incorporated and held its first meeting in Montreal as a section of the Canadian Medical Association with Dr. Robin Pierce as President. From these humble beginnings, the CUA has grown tremendously in its scope and influence, well beyond solely hosting an annual academic meeting. Our association over the last two decades has carefully expanded to encompass many educational and advocacy endeavours for the benefit of the urological community, our patients, and their family members–including the creation and support of this journal. It seems to us there is a great deal to celebrate indeed.

In this issue of *CUAJ*, readers will encounter numerous informative articles, with some very insightful editorial comments, many of which you will want to refer to going forward, not only as an updated review, but also for their practical recommendations of some of most common clinical issues in urology. Chief among these include a review of advanced kidney cancer by the Kidney Cancer Research Network of Canada after their 6th Canadian Kidney Cancer Forum held in Toronto earlier this year.[1] These updated statements and recommendations highlight several recent randomized trials and observational studies informing us on the management of locally advanced and metastatic kidney cancer, with a specific nod to the Canadian perspective. As well, you will find the most recent instalment of the CUA guidelines focused on the management of small renal masses.[2] Within these recommendations pay particular attention to the evolving role of biopsy prior to treatment decisions.

Furthermore, within this issue you will find guideline recommendations on active surveillance (AS) for the management of localized prostate cancer commissioned by the Program in Evidence-based Care at Cancer Care Ontario (CCO).[3] These guidelines should become required reading and will undoubtedly lead to a fair amount of discussion within our community. Some components of these recommendations, though far from controversial, may stimulate some debate given our own experiences and perceptions, as well as the lack of definitive data to support many of the nuances that make up AS. In Canada, the concept of not treating a man diagnosed with a low-grade and low volume prostate cancer has long been understood to be a credible option, complementing discussions around surgery and radiation for curative intent. Perhaps the earlier adoption of AS in Canada had been born out of sober reflection afforded by realities of a universal healthcare system. Potentially, we have also been positively influenced by the early experience of Dr. Laurence Klotz and the Sunnybrook AS cohort. In any event these new guideline recommendations will undoubtedly serve as a new standard-bearer.

Although there are several large cohort studies to inform us on the key elements of AS, the lack of any higher level of evidence necessitates these guidelines to be created with a good dose of expert opinion–albeit highly informed opinion. This document well summarizes the state of the art of AS and also drives a number of important research questions. However, the three main questions that these guidelines focus on include: (1) who should (or shouldn't) be offered AS; (2) how should we follow these men; and (3) when do we institute curative therapy? Several cohorts, involving thousands of men with (at best) intermediate term follow-up, are available to inform us on strategies to mitigate the over-treatment of men with low-risk disease associated with prostate-specific antigen screening. These include reports from Johns Hopkins University, the Prostate cancer Research International: Active Surveillance project (PRIAS), University of California, San Francisco and of course the Sunnybrook cohort.[4-6] Each has somewhat different entry criteria, follow-up protocols, and definitions of progression so it is not surprising that there may be some confusion driven by some differences in expected

outcomes among different protocols. These current guideline recommendations do a commendable job in clarifying, and to some degree simplifying, the care delivery of AS.

Although a main objective of AS is to limit the harm of men undergoing avoidable treatments for some definable period of time, a not so subtle concern of most clinicians and patients is the rate of mortality specifically due to a choice of AS–effectively the chance of missing the window of opportunity for cure. Whatever this rate actually is, the bottom line is that it is not zero and none of the world's literature is yet able to help us finesse the answer. Probably the best estimate will come from the Sunnybrook AS cohort recently updated by Klotz and colleagues, representing one of the largest (993 men) with the longest follow-up to date with a median follow-up of 6.4 years. The authors recently report an overall rate of metastasis of 2.8%, already occurring at a median of 9.6 years after diagnosis.[3] The successes of AS though seem undeniable with exceedingly high cancer-specific survival at 10 years. In those in the Sunnybrook cohort with adequate follow-up, more than 75% of the men remained on surveillance at 5 years, and over half beyond 15 years, all avoiding active treatments and obviating subsequent effects on quality of life.

Important questions however remain unanswered. Would more rigorous entry and follow-up criteria mitigate any risk of AS "failure"? Should we deny the obvious benefits of AS to a younger man with small volume Gleason pattern 4? Would loosening follow-up strategies make AS more appealing to some men? Perhaps multiparametic magnetic resonance imaging and serum or tissue-based biomarkers will represent a way forward and lead us into the next iteration of AS? These CCO guidelines expertly review the current best estimate of the role and practice of AS, striking as much of a balance as possible concerning the rigour of entry and surveillance criteria. However, some of the recommendations incorporate evolving concepts that may not be a standard of care (or even available) within your community. A careful reading and reflection of these forward-thinking recommendations, particularly around follow-up algorithms, will be needed within our systems/practices to assure a consistent, high level of care delivery for men on AS.

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