Are We Overtreating Prostate Cancer?

I would have to say if I am honest with myself and those of you reading this, I do not know if we are overtreating prostate cancer. On an individual basis all of us in busy urological practice can point to cases that make us answer this question in different ways. Take the 51-year-old black man on whom I performed nerve sparing radical prostatectomy 4 months ago. He had intermediate volume Gleason sum 8 disease on surgical specimen but the disease was organ confined. He has regained continence and is starting to regain erectile capacity. I believe that I did not overtreat him and likely added years to his life. I felt good about that case. On the other hand, I can count a number of early to mid 70-year-old men with single core, low volume, Gleason sum 6 prostate cancer seen in the last year for whom I believe I may have unnecessarily opened a Pandora’s box. I struggle with what to tell them and wonder what I would do if faced with this situation as a patient of a similar age. Certainly the question posed to me to address in this editorial is complex but extremely relevant in current urological practice. In this issue of The Journal 3 important articles shed more light on this topic.

On the surface the question of overtreatment of prostate cancer generally points to active treatment of low volume disease in men who will not live long enough to benefit. However, what about the potential to overtreat men who most would agree need treatment? Using the CaPSURE™ (Cancer of the Prostate Strategic Urologic Research Endeavor) database Wu et al (page 2415) examined the health related quality of life of multimodal treatment approaches for clinically localized prostate cancer. It seems that the mantra of recent years has been multimodal therapy. For example, at my institution and many others we have been preaching the value of multidisciplinary teams of urological surgeons, radiation oncologists and medical oncologists making a multipronged attack on high risk prostate cancer. Certainly many men would appear to need this intensive approach to improve outcomes. However, we have to be careful because for some men with lower risk features the multimodal approach may worsen outcomes, particularly urinary and sexual outcomes. In particular, the combination of external beam radiotherapy and brachytherapy (so-called “beam plus seeds”) may worsen urinary function and bother during extended followup. In practice this combination is sometimes inappropriately applied to low risk patients. Not to be too cynical but combination therapy is sometimes applied for the wrong reasons including financial gain. In this situation we sometimes do overtreat some men with prostate cancer.

Simone et al (page 2447) also address this topic of overtreatment using the CaPSURE database. Although short on followup the authors attempt to predict nonprostate cancer mortality using pretreatment variables. While more work is needed they show that lower educational level, active smoking status, concurrent malignancy and lower physical function at the time of diagnosis were generally predictive of nonprostate cancer mortality at a mean followup of 3.3 years. I applaud the authors for this initial attempt and hope that future study using this maturing database and others will help us develop more robust tools. The true crux of the matter is being able to predict the competing virulence of prostate cancer versus other disease or natural death in individual men.

As previously noted most readers would likely think of overtreatment of prostate cancer in terms of under use of active surveillance/watchful waiting. In an important study Stattin et al (page 2423) from Sweden report the first population based survey of surveillance and deferred treatment. Overall 26% of men were initially observed and a third (34%) went on to receive active treatment after 4 years of followup. The authors point out that this approach represents watchful waiting and active surveillance, and it was not possible to break down the proportion of each component. Their findings are quite similar to data previously reported from the United States military Center for Prostate Disease Research database in which approximately half of the men had progression to active treatment after approximately 5 years.1,2 These snapshots of surveillance/watchful waiting are enlightening but do not clearly tell us who should be offered this approach, how to do it, and how to define success and failure. Only randomized controlled trials such as the multicenter START trial (NCT00499174) and others will further our understanding.

The paradox of the question of overtreatment is proper patient selection. In 2008 we simply do not have enough tools to do it well as often as we need. For example, take the patient who is offered active surveillance and in whom cancer progresses. Some will lose the window of opportunity on single modality treatment and will pay a price in terms of quality of life. Progression will translate to higher risk disease necessitating multimodal therapy and a sexual and/or urinary quality of life hit. Like so many studies on prostate cancer these 3 important contributions provide us with a new understanding but point to many areas of uncertainty needing further study. To my urology colleagues reading this who are still in training,
these are exciting times. Our great field of urology needs a cadre of “prostate students” to take up the continuing challenges and further advance our field.

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REFERENCES

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