EDITORIAL

Clinical Research

The evolving standards of active surveillance monitoring

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Al Awamlh et al. analyzed the SEER Prostate with Watchful Waiting database to explore the intensity of testing among men electing active surveillance following the diagnosis of low grade prostate cancer [1]. They specifically looked at three primary metrics to monitor disease progression: serum psa values, prostate biopsy, and multi-parametric MRI studies. Their primary conclusions were that Black men had a lower frequency of receiving all three tests when compared to non-Black men and that men in the highest income quintile were likely to undergo PSA tests and MRI scans more frequently when compared to men in the lower income quintiles. None of these findings are surprising since race and income play significant roles in virtually all health care delivered in the United States.

A more interesting observation is the dramatic increase in the use of mpMRI studies during the period of analysis from 2010 to 2015. This reflects our changing understanding of what constitutes clinically significant disease and therefore which cases should be treated and which cases should be observed. This article spans the mid portion of a journey that began over two decades ago when reports from Sweden and Connecticut in 2004 and 2005 on the natural history of prostate cancer questioned the then current paradigm that called for surgery or radiation to treat all localized prostate cancers since clinicians assumed that they would eventually metastasize [2, 3].

The publication of the SPCG4 trial results in 2011, the PIVOT trial results in 2012 and the PROTECT trial results in 2016 have altered our understanding of the natural history of prostate cancer and the efficacy of treatment [4–6]. While the value of PSA testing as a public health measure remains controversial, the widespread practice of annual PSA testing in the US has resulted in a dramatic stage shift and grade shift in favor of low volume, low grade cancers. The CAP trial results published in 2018 demonstrated that testing a PSA naïve population will identify low grade disease in ~75% of cases [7]. The PROTECT trial results show that <1% of these men will die from their disease within 10 years. A report on the 15 year outcomes is expected later this year. As a consequence of this new information, the interest in pursuing active surveillance has dramatically increased in the US and was further accelerated with the addition of mpMRI, first popularized in the UK, and reported by Kasivisvanathan et al. in 2018 [8].

Early adopters of active surveillance did not have the benefit of any of these reports. They were unsure of the natural history of low grade disease and often advised obtaining multiple PSA tests per year and annual biopsies. How often PSA tests, prostate biopsies and mpMRI's should be performed is still open to debate. Those clinicians who have followed large numbers of patients on active surveillance have come to appreciate the wide variation in "normal" PSA values especially in men who have very large prostates. Many of us have grown more cautious of recommending frequent prostate biopsies in favor of ordering more mpMRI's in the face of a rising PSA. Most patients return for an annual visit, but some become complacent and unfortunately a few are lost to follow up that is often related to race, education, and income. Al Awamlh et al. documented the impact of these factors in the follow up of men on active surveillance from 2010 to 2015. I suspect that they continue to impact virtually all health care delivery in the US today.

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AUTHOR CONTRIBUTIONS

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COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

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