RESEARCH HIGHLIGHTS

PROSTATE CANCER

Active surveillance—more than 'wishful' waiting?

n interim analysis of the largest prospective cohort of patients managed via active surveillance has been published online in *BJU International*. Lead author Roderick van den Bergh concludes that this strategy is a feasible "temporary solution for the overtreatment of overdiagnosed prostate cancer".

Programs for active surveillance—also known as expectant management—were initiated in the mid 1990s. At that time, a shift in the predominant presentation of prostate cancer was occurring. Increasingly widespread use of PSA testing was leading to the identification of a higher proportion of men with asymptomatic low-grade disease. Many clinicians recognized that radical treatment of older patients who had malignancy of this type was unlikely to prolong survival, while exposing recipients to the morbidity associated with prostatectomy and radiotherapy.

The controversy that accompanied implementation of the first active surveillance programs has persisted for more than a decade. There are still no validated criteria on which to base selection of patients, and long-term outcomes data are lacking. Several randomized controlled trials are currently being conducted in an effort to address these issues. In the meantime, short-term results from the Prostate Cancer Research International: Active Surveillance (PRIAS) study support the utility of expectant management for selected patients.

The PRIAS study is an offshoot of the European Randomized Study of Screening for Prostate Cancer, which has shown that PSA-based screening can reduce the rate of disease-related death by 20%. Asymptomatic men with small, localized and well-differentiated cancer were offered active surveillance (measurement of PSA level every 3–6 months, a digital rectal examination every 6–12 months, plus repeat biopsies after 1, 4 and 7 years) as an alternative to immediate treatment.



Analysis of data from the first 500 participants revealed a 2-year survival rate free from active therapy of 73%. A PSA doubling time of 0-3 years and adverse findings on repeat biopsy (malignancy detected in more than two cores or a Gleason score exceeding 3+3=6) were the main drivers of a switch to treatment from active surveillance.

Accurate assessment of the risk—benefit ratio of active surveillance requires reporting of radical prostatectomy findings for patients who eventually require this intervention. To this end, Jonathan Epstein and colleagues from The Johns Hopkins Hospital in Baltimore have published findings from follow up of 470 men in their active surveillance program. Mean time from first biopsy until prostate removal was 29.5 months among 51 men. Cancer extended beyond the gland in more than 35% of cases. As the primary location of all large dominant tumor nodules was anterior, Epstein recommends sampling the transition zone during every active surveillance biopsy.

That one third of those in the rigorously managed Johns Hopkins active surveillance cohort "slip[ped] through the cracks" is a reminder that this strategy should be considered investigational for patients expected to live longer than

10 years. So contends William J. Catalona from the Feinberg School of Medicine in Chicago in an Editorial Comment accompanying the *Journal of Urology* paper by Epstein *et al.* Catalona also stresses the importance of weighing the psychological impact of delaying treatment against the risk of adverse effects from immediate intervention.

A questionnaire-based survey of 150 men participating in the PRIAS study has shown that their levels of anxiety and distress do dot differ markedly from those of patients who elect to be treated immediately. Those who felt they had had significant input into management decisions were less likely to be anxious, emphasizing the need for open and collaborative communication between patient and clinician.

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Original articles van den Bergh, R. C. N. et al. Short-term outcomes of the prospective multicentre 'Prostate Cancer Research International: Active Surveillance' study. BJU Int. doi:10.1111/j.1464-410X2009.08887.x

Duffield, A. S. et al. Radical prostatectomy findings in patients in whom active surveillance of prostate cancer fails. J. Urol. 182, 2274-2279 (2009). van den Bergh, R. C. N. et al. Anxiety and distress during active surveillance for early prostate cancer. Cancer 115, 3868-3878 (2009).