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EDITORIAL COMMENT

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Active surveillance (AS) for low-risk prostate cancer is increasingly accepted as being one of the appropriate treatment options for men with low-risk prostate cancer but many questions remain as to how to optimally monitor these patients. Many physicians today use a combination of prostate-specific antigens, prostate examinations, symptoms, and biopsies to assess for the possibility of “progression.” Various criteria are used to move patients from surveillance to active treatment with upgrading on Gleason scores being the most commonly accepted criteria. Regardless, much debate on this issue has occurred, and there are no comparative trials to guide physician decision making.

Magnetic resonance imaging (MRI) has played an increasing role in the AS patient in many centers. As with any new technologies, there are variations and nuances that extend beyond the technology itself, and the assessment of “lesions of interest” remains operator dependent. MRI interpretation, like Gleason score assessment, is subject to considerable variation between centers and even between radiologists.

In the study by Dianat et al¹, MRI “visibility” and “invisibility” were assessed in an attempt to determine whether this dichotomous segregation would influence subsequent adverse findings on prostate biopsy (using the Epstein criteria). The study was a single-institution study and consisted of 84 patients with visible lesions and 12 with invisible lesions. The 2 groups were well matched with regard to baseline characteristics (but follow-up was longer in those with visible tumors).

The study found that individuals with magnetic resonance (MR)–invisible tumors at baseline were less likely to have subsequent adverse pathologic findings on prostate biopsy. Of men with MR-invisible tumors, 1 of 12 (8.5%) had adverse pathologic findings vs 34 of 84 (40.5%) had adverse pathology in the MR-visible tumor subset. This is an interesting finding and suggests that MRI might play a role in allocation of AS patients into lower or higher risk categories.

The limitations of the study are clear. The study is small and single center. Epstein criteria, though commonly accepted, may or may not be important. The follow-up was relatively short. The biopsy methodology was not clearly specified and biopsy methodology is

changing. There is no correlation of MRI with prostate pathology from radical prostatectomy specimens.

Despite these limitations, the authors are to be commended for their preliminary study. Much more work needs to ensue before their findings can be accepted as a guide for general urologists. Larger studies, longer follow-up, inclusion of multiple centers, and development of defined biopsy protocols are suggested first steps. Skeptics will point out that unless the entire gland is pathologically assessed, the findings should be considered as provocative but not definitive.

References

1. Dianat SS, Carter HB, Pienta KJ, et al. Magnetic Resonance–invisible Versus Magnetic Resonance–visible Prostate Cancer in Active Surveillance: A Preliminary Report on Disease Outcomes [e-pub ahead of print]. *Urology*. [accessed September 24, 2014]