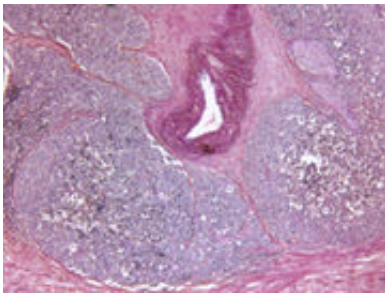


MRI-ultrasound fusion improves prostate biopsy cancer detection

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(HealthDay)—Magnetic resonance imaging-ultrasound fusion targeted prostate biopsy (MRF-TB) improves detection and risk stratification of high-grade disease and limits detection of clinically insignificant prostate cancer, according to a study published in the December issue of the *The Journal of Urology*.

Neil Mendhiratta, from the New York University Langone Medical Center in New York City, and colleagues reported clinical outcomes for 452 consecutive men presenting for primary [prostate biopsy](#). Participants underwent prebiopsy multiparametric magnetic resonance imaging followed by MRF-TB and systematic biopsy.

The researchers detected [prostate cancer](#) in 54.2 percent of 382 men (mean age, 64 years; mean prostate-specific antigen, 6.8 ng/mL) who

met inclusion criteria. The cancer detection rate was 49.2 percent for systematic biopsy and 43.5 percent for MRF-TB ($P = 0.006$). Compared with systematic biopsy, MRF-TB detected more Gleason score 7 or greater cancers (88.6 versus 77.3 percent; $P = 0.037$). Overall, 82.9 percent of the 41 cancers detected by systematic biopsy but not by MRF-TB demonstrated Gleason 6 disease, and 63.4 and 82.9 percent, respectively, were clinically insignificant by Epstein criteria and a University of California-San Francisco-Cancer of the Prostate Risk Assessment score of 2 or less.

"Prebiopsy [magnetic resonance imaging](#) followed by MRF-TB decreases the detection of low-risk cancers while significantly improving the detection and [risk stratification](#) of high-grade disease," the authors write.

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