

MRI diagnostic for differentiating low-grade bladder cancers

January 29 2018



(HealthDay)—Magnetic resonance (MR) imaging is accurate in

differentiating T1 or lower tumors from T2 or higher tumors among patients with bladder cancer, according to a review published in the February issue of *Radiology*.

Li Huang, M.D., Ph.D., from Sun Yat-Sen University in Guangzhou, China, and colleagues conducted a systematic literature review to identify studies evaluating the [diagnostic accuracy](#) of MR imaging for differentiating stage T1 or lower tumors from stage T2 or higher tumors in patients with bladder cancer. Additionally, studies assessing the influence of different imaging protocols in patients with bladder cancer were examined.

The researchers identified 17 studies totaling 1,449 patients with [bladder cancer](#). Across studies, the pooled sensitivity of MR imaging was 0.90 and the specificity was 0.88 for differentiating tumors staged T1 or lower from those staged T2 or higher. Sensitivity (0.92) and specificity (0.96) were improved with diffusion-weighted imaging and use of higher field strengths (3 T).

"Our meta-analysis shows [high sensitivity](#) and specificity for MR imaging to differentiate T1 or lower tumors from T2 or higher tumors before surgery and that a 3.0-T device combined with diffusion-weighted imaging had the highest sensitivity and specificity in all studies," the authors write.

More information: [Abstract](#)
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Citation: MRI diagnostic for differentiating low-grade bladder cancers (2018, January 29)
retrieved 26 April 2024 from

<https://medicalxpress.com/news/2018-01-mri-diagnostic-differentiating-low-grade-bladder.html>

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