Editorial

Commentary on “Endorectal magnetic resonance imaging for predicting pathologic T3 disease in Gleason score 7 prostate cancer: Implications for prostate brachytherapy”

MRI has long been looked to as a potential tool to better select patients for prostate brachytherapy. The rationale is to use MRI to identify patients with substantial extracapsular extension (ECE), for whom brachytherapy is presumably inadequate treatment. Like Dr Pugh et al. (1), I find this rationale logical and compelling. However, there are several problems with the use of current MRI technology for treatment selection.

First, after exhaustive imaging–pathology correlative studies, MRI is still widely deemed to be too inaccurate for surgical staging. If it is too inaccurate for presurgical staging, it is hard to believe that it is prime time ready for brachytherapy selection.

A second problem with the rationale for using MRI to direct the use of supplemental external beam radiation is the assumption that external beam radiation is more effective against ECE. Although I cannot prove it, it seems likely that patients with extensive ECE (>5 mm) are beyond the limits of curability with brachytherapy or external beam radiation because such patients most likely would be at high risk of nodal or micrometastatic disease. Treating them with brachytherapy and/or external beam radiation would probably be futile.

A third issue that I have with the study of Dr Pugh et al. is their failure to separate the analysis of capsular ECE vs. seminal vesicle (SV) ECE. Based on the extremely high long-term post-prostatectomy failure rate of patients with ECE, regardless of adjuvant radiation, I believe that SV disease is a marker of metastatic disease, and that SV invasion on MRI signifies incurability, not the need for beam radiation. It would be helpful to know what percent of patients reported by Pugh had substantial ECE related to SV invasion rather than capsular penetration.

Our group periodically reconsiders the use of MRI for brachytherapy patient selection. My own take remains what it has been for the last 10 years: if a well-executed low-dose-rate (or high-dose-rate) procedure cannot cure a patient of prostate cancer, then the patient is beyond cure with external beam radiation (or surgery). Further studies like those of Pugh et al. may prove me wrong. But I doubt it.

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Reference