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https://doi.org/10.1016/j.eururo.2019.07.019

Re: EAU Guidelines: Prostate Cancer 2019

Mottet N, van den Bergh RCN, Briers E, et al

https://uroweb.org/guideline/prostate-cancer/

Experts' summary:

A long-established prerequisite for a nerve-sparing (NS) approach in radical prostatectomy is a low risk of extracapsular extension (ECE) of prostate cancer [1]. Traditionally, ECE risk has been assessed preoperatively on the basis of clinical and pathological variables for prostate biopsy. In the 2017 European Association of Urology (EAU) guidelines, Partin tables are recommended for deciding on NS; however, these provide a probabilistic ECE risk estimation without information on laterality or acting as decision rules, and thus are inconclusive for guidance on surgical dissection.

The EAU guidelines changed their recommendation in the 2018 version, suggesting referral to side-specific and externally validated nomograms. This recommendation is retained in the updated 2019 version, and includes cT stage, International Society for Urological Pathology grade, nomograms, and multiparametric magnetic resonance imaging (mpMRI) to guide an NS approach.

Experts' comments:

How can we definitively predict ECE risk and avoid positive surgical margins? According to a systematic review [2], only four nomograms have been developed for side-specific prediction. External validation (EV), even if recommended, cannot guarantee the generalizability of a model [2]. This is the case for Partin 1997, the most popular nomogram used to date, with a total of 2092 PubMed citations [2]. Despite the abundance of EVs, Partin tables perform poorly when translated to a European setting, and are thus of limited value for distant and different data sets [2]. Indeed, it is recognized that EV outcomes are often ambiguous as they are affected by temporal, geographic, and domain limitations [2].

Moving toward 2019, it would be anachronistic not to consider how urological practice has changed in view of mpMRI. Nevertheless, mpMRI sensitivity for predicting ECE is still only at 0.57, so even if it is attractive, the role of mpMRI added to existing models or included in novel nomograms is still controversial [3].

Keeping in mind how the NS recommendation has evolved over time, what should we expect in the future? The 2019 guidelines are beginning to suggest post hoc analysis or preoperative mpMRI to guide these decisions [1,4]. Given the limits of mpMRI, intraoperative frozen sections may represent a more reliable source of information to develop such guidance [1]. A NeuroSAFE (neurovascular structure–adjacent frozen-section examination) approach has been advocated, but its widespread use is limited by costs and the need for a fully equipped laboratory. The recent advent of ex vivo confocal microscopy seems an opportunity to provide a NeuroSAFE-like approach, with a lower organizational burden and real-time diagnosis of freshly excised tissue, that could be suitable for surgical requirements [5].

In view of the novel decade, a combined approach involving surgical preplanning and intraoperative microscopy-based tailoring could be a further cornerstone for extending the implementation of safe NS approaches in radical prostatectomy.

Conflicts of interest: The authors have nothing to disclose.

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https://doi.org/10.1016/j.eururo.2019.07.014