

Urological Survey

prostatectomy. Patients with perineural invasion who meet criteria for active surveillance should not be excluded from this treatment option.

Editorial Comment

Perineural invasion (PNI) on needle prostatic biopsies as a marker of extraprostatic extension has been controversial. In almost all studies perineural invasion has been related to extraprostatic extension in univariate analysis but in only a few studies in multivariate analysis. The practical importance relates to the decision of whether to sacrifice part or all of the neurovascular bundle on the side of the biopsy with PNI in planning nerve-sparing radical prostatectomy. The study from Johns Hopkins has shown that cases that meet biopsy criteria for active surveillance yet have perineural invasion showed no significant difference from those without perineural invasion in terms of adverse findings at radical prostatectomy. Patients with perineural invasion who meet criteria for active surveillance should not be excluded from this treatment option. Cases with biopsy criteria for active surveillance are considered insignificant having Gleason score 6 or less, 2 or fewer positive cores and 50% or less involvement in any positive core.

The findings are very similar to a study from my Institution published in *Int Braz J Urol* (1). We found that tumor extent on needle biopsies influences the predictive value of PNI for pathologic stage > pT2 (pT3a and/or pT3b) on radical prostatectomies. In patients with more extensive tumors on needle biopsy, PNI predicted pathologic stage > pT2 on radical prostatectomy on univariate analysis but on multivariate analysis did not show independent predictive value. This finding is in accordance to most of the studies in the literature. In patients with less extensive tumors on biopsy (< 13.6% of tissue in mm containing carcinoma) and PNI, there was no association to any one clinical or pathological variables studied; no difference in the time to biochemical (PSA) progression-free outcome comparing to patients without PNI; and, no predictive value for pathologic stage > pT2 on both univariate and multivariate analysis. With a higher number of small tumors currently detected, our results favor that PNI on needle biopsy should not be considered in the decision to sacrifice or not the neurovascular bundle in planning nerve-sparing radical prostatectomy.

Reference

1. Billis A, de Quintal MM, Meirelles L, Freitas LL, Magna LA, Ferreira U: Does tumor extent on needle prostatic biopsies influence the value of perineural invasion to predict pathologic stage > T2 in radical prostatectomies? *Int Braz J Urol*. 2010; 36: 439-47; discussion 448, 448-9.

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Handling and reporting of transurethral resection specimens of the bladder in Europe: a web-based survey by the European Network of Urothology (ENUP)

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Aims: To collect of information about European practices on handling and reporting of transurethral resection specimens of the bladder.

Methods and Results: The European Network of Uro pathology is a communication network that includes 335 pathology laboratories in 15 western European countries. A web-based questionnaire was answered by 52.2% of members. Some routines were adopted by a majority: formalin fixation (92.5%), separate containers for tumors and resection base (72%) and embedding of the entire specimen (60%). Cancer along/in adipose tissue would be reported as pT3a by 19.5% and non-invasive urothelial carcinoma in prostatic ducts/glands as pT4a by 16.1%. Papillary urothelial neoplasia of low malignant potential is recognized by 72.6% but rarely reported. Immunohistochemistry is rarely or sometimes used for diagnosing bladder cancer by 91.7%, and the most frequently used markers are CK20 (76.9%), CK7 (66.7%) and Ki67 (38.8%). Only 24.8% report prognostic markers, with Ki67 (84.4%) and p53 (64.4%) being most common. Only 50.9% use the International Society of Urological Pathology 1998/World Health Organization (WHO) 2004 grading system, followed by WHO 1973 (43.4%) and WHO 1999 (31.4%).

Conclusions: There is still variability in routine practice and a need for standardization of methodologies. These results may be helpful when judging what recommendations are reasonable to issue.

Editorial Comment

Surveys on handling and reporting of surgical specimens are very important tools for consensus conferences among pathologists. Due to the high frequency of transurethral resection specimens of the bladder, standardization of methodologies are of utmost importance.

In TUR resections of malignant neoplasias, the pathology report should inform:

1. The histologic diagnosis. Most of the tumors are urothelial carcinomas. Sarcomas are very rare. There are several histologic variants of urothelial carcinomas.
2. Configuration. Papillary, non papillary, inverted growth.
3. Differentiation. Squamous differentiation is more frequent than glandular differentiation. There are other rare types of differentiation. Tumors with differentiation, in general, show a higher stage at diagnosis.
4. Grading. Several systems may be used: grades 1, 2, and 3 (WHO); low-grade (corresponding to grade 1) and high-grade (corresponding to grades 2 and 3) (WHO/International Society of Urological Pathology); and combined numbers, e.g. 1+2 (low-grade in most areas + high-grade as a secondary grade, 1+1 (low-grade in all areas examined), etc.
5. Staging. According to the TNM: Tis (flat carcinoma in situ), Ta (papillary non invasive or papillary in situ), T1 (subepithelial connective tissue invasion), T2 (muscularis propria invasion). An important distinction for the pathologist is muscularis propria vs. muscularis mucosae. Invasion of the latter is still T1.
6. A very important information that should be included in the report is presence or not of sections of muscularis propria in the TUR. In cases of T1 without sections of muscularis propria, stage T2 cannot be excluded. A new TUR should be performed for an adequate staging.

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