nancy. These conclusions however deserve some considerations. For example, if we assume that cystoscopy is still the reference standard for bladder cancer detection, MDCT urography would have been essential for the detection only upper tract neoplasm observed in 2% of examinations (six out 289). It is clear that this paper brought a very important contribution to the difficult task of balancing risk and benefits when performing MDCT-urography for hematuria. In our institution, for example, post-contrast phases are not obtained only in patients in who unenhanced scans reveals stone in the ureter or in the bladder. These patients and their referral physicians are instructed about the necessity of complimentary post-contrast phases only when hematuria persists after treatment or elimination of the stone.

There is no doubt that this subject is debatable and studies including patients with other risk factors are needed. Meanwhile radiologist should make efforts to reduce the radiation dose from MDCT-urography without impairing its diagnostic accuracy.

Dr. Adilson Prando
Head, Department of Radiology and
Diagnostic Imaging, Vera Cruz Hospital
Campinas, São Paulo, Brazil
E-mail: adilson.prando@gmail.com

PATHOLOGY

Significance of Prostate Adenocarcinoma Perineural Invasion on Biopsy in Patients Who are Otherwise Candidates for Active Surveillance

Al-Hussain T, Carter HB, Epstein JI
Department of Pathology, The Johns Hopkins Hospital, Baltimore, Maryland
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Purpose: Perineural invasion on biopsy is associated with extraprostatic extension at radical prostatectomy. To our knowledge the significance of perineural invasion on biopsy in patients who otherwise meet the criteria for active surveillance has not been studied.
Materials and Methods: The biopsy criteria for active surveillance were Gleason score 6 or less, 2 or fewer positive cores and 50% or less involvement any positive core. All cases had at least 12 biopsy cores. A total of 313 cases met the biopsy criteria for active surveillance, and elected to undergo immediate radical prostatectomy at our institution between 1992 and 2008. These cases included 51 with perineural invasion and 262 without perineural invasion.
Results: There was no significant difference in patient age and mean serum prostate specific antigen at diagnosis in cases with and those without perineural invasion. Cases with perineural invasion on biopsy had a higher maximum percentage of cancer on biopsy (18.6%) vs those without perineural invasion (15.0%, $p = 0.02$). Cases with perineural invasion also had slightly more with 2 positive cores compared to cases without perineural invasion (56.9% and 39.7%, respectively, $p = 0.02$). Despite a greater extent of cancer on biopsy, cases with and those without perineural invasion on biopsy showed no significant difference in surgical margin involvement (6% vs 7.3%, respectively) or organ confined disease (84.3% vs 91.6%, respectively).
Conclusions: 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.

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 pathological 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.

Dr. Athanase Billis
Full-Professor of Pathology
State University of Campinas, Unicamp
Campinas, São Paulo, Brazil
E-mail: athanase@fcm.unicamp.br

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

Lopez-Beltran A, Algaba F, Berney DM, Boccon-Gibod L, Camparo P, Griffiths D, Mikuz G, Montironi R, Varma M, Egevad L
Unit of Anatomic Pathology, Cordoba University Medical School, Cordoba, Spain
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