

International Society of Urological Pathology (ISUP) Consensus Conference on Handling and Staging of Radical Prostatectomy Specimens. Working group 2: T2 substaging and prostate cancer volume

van der Kwast TH, Amin MB, Billis A, Epstein JI, Griffiths D, Humphrey PA, Montironi R, Wheeler TM, Srigley JR, Egevad L, Delahunt B; the ISUP Prostate Cancer Group

Department of Pathology, University Health Network and University of Toronto, Toronto, ON, Canada

Mod Pathol. 2010 Sep 3. [Epub ahead of print]

Abstract: The 2009 International Society of Urological Pathology consensus conference in Boston made recommendations regarding the standardization of pathology reporting of radical prostatectomy specimens. Issues relating to the substaging of pT2 prostate cancers according to the TNM 2002/2010 system, reporting of tumor size/volume and zonal location of prostate cancers were coordinated by working group 2. A survey circulated before the consensus conference demonstrated that 74% of the 157 participants considered pT2 substaging of prostate cancer to be of clinical and/or academic relevance. The survey also revealed a considerable variation in the frequency of reporting of pT2b substage prostate cancer, which was likely a consequence of the variable methodologies used to distinguish pT2a from pT2b tumors. Overview of the literature indicates that current pT2 substaging criteria lack clinical relevance and the majority (65.5%) of conference attendees wished to discontinue pT2 substaging. Therefore, the consensus was that reporting of pT2 substages should, at present, be optional. Several studies have shown that prostate cancer volume is significantly correlated with other clinicopathological features, including Gleason score and extraprostatic extension of tumor; however, most studies fail to demonstrate this to have prognostic significance on multivariate analysis. Consensus was reached with regard to the reporting of some quantitative measure of the volume of tumor in a prostatectomy specimen, without prescribing a specific methodology. Incorporation of the zonal and/or anterior location of the dominant/index tumor in the pathology report was accepted by most participants, but a formal definition of the identifying features of the dominant/index tumor remained undecided.

Editorial Comment

The clinical staging of prostate cancer reflects the detection methods employed. Substaging of clinical stage T2 prostate carcinoma is based on the extent of the abnormality palpated during a digital rectal examination. In the 2009 TNM system for prostate cancer the clinical and pathological substaging of T2 cancers are classified into 3 groups: T2a (tumor involves one-half of one lobe or less), T2b (tumor involves more than one-half of one lobe, but not both lobes), and T2c (tumor involves both lobes) (1).

Pathologic staging tries to maintain symmetry with clinical staging, allowing a direct comparison of both. However, in contrast to clinical substaging of T2 prostate cancers, is controversial whether pathologic T2 substaging conveys prognostic information.

During the consensus conference sponsored by the International Society of Urological Pathology (ISUP) on handling and staging of radical prostatectomy specimens held in Boston during the 98th meeting of the United States and Canadian Academy of Pathology (USCAP), 65.5% of the attendants answered that the current pathologic T2 substaging system should not be used. Answering to another question, 63.4% favored to be reduced to two categories based on studies showing that pathological T2b tumor does not exist (2,3).

The lack of symmetry between clinical and pathological T2 staging may be apparently explained in part by the fact that clinical criteria used in assessing stage indirectly estimate the chance of understaging and in this way they seem to stratify the heterogeneous group of clinical stage T2 patients (4). The multifocality seen in 83-87% of prostate cancers (5,6) is another cause for the absence of symmetry between clinical and pathological T2 substaging. Prostate cancer may be extensive on one lobe (index tumor) and only insignificant

on the other side. Should this case be considered pT2c? In this particular example what should be a minimum extent for a case to be considered bilateral? During the consensus conference there was no consensus regarding definition of index tumor, and the minimum size for a second tumor to be considered for the whole case to be classified as pT2c.

Overview of the literature indicates that current pathological T2 substaging criteria lack clinical relevance and the majority of conference attendees wished to discontinue pT2 substaging. Therefore, the consensus was that reporting of pathological T2 substages should, at present, be optional.

References

1. International Union Against Cancer (UICC). TNM Classification of malignant tumours, 7th ed, Sobin LH, Gospodarowicz M, Wittekind Ch (eds). Geneva:Wiley-Blackwell, 2009, pp. 243-8.
2. Eichelberger LE, Cheng L: Does pT2b prostate carcinoma exist? Critical appraisal of the 2002 TNM classification of prostate carcinoma. *Cancer*. 2004; 100: 2573-6.
3. Quintal MM, Magna LA, Guimaraes MS, Ruano T, Ferreira U, Billis A: Prostate cancer pathologic stage pT2b (2002 TNM staging system): does it exist? *Int Braz J Urol*. 2006; 32: 43-7.
4. van der Kwast TH: Substaging pathologically organ confined (pT2) prostate cancer: an exercise in futility? *Eur Urol*. 2006; 49: 209-11.
5. Arora R, Koch MO, Eble JN, Ulbright TM, Li L, Cheng L: Heterogeneity of Gleason grade in multifocal adenocarcinoma of the prostate. *Cancer*. 2004; 100: 2362-6.
6. Wise AM, Stamey TA, McNeal JE, Clayton JL: Morphologic and clinical significance of multifocal prostate cancers in radical prostatectomy specimens. *Urology*. 2002; 60: 264-9.

Dr. Athanase Billis

Full-Professor of Pathology

State University of Campinas, Unicamp

Campinas, São Paulo, Brazil

E-mail: athanase@fcm.unicamp.br

RECONSTRUCTIVE UROLOGY

doi: 10.1590/S1677-55382010000500022

The use of uroflowmetry to diagnose recurrent stricture after urethral reconstructive surgery

Erickson BA, Breyer BN, McAninch JW

Department of Urology, University of California-San Francisco, San Francisco, California, USA

J Urol. 2010; 184: 1386-90

Purpose: The ability of uroflowmetry to diagnose recurrent stricture disease after urethroplasty has not been fully investigated.

Materials and Methods: Our routine post-urethroplasty monitoring includes retrograde urethrogram and voiding cystourethrogram at 3 and 12 months, in addition to uroflowmetry at 3-month intervals for a year. All uroflowmetry data, including maximum flow rate, voided volume and voiding curve shape, as well as retrograde urethrogram/voiding cystourethrogram and voiding symptom data are stored in a prospectively maintained urethroplasty database that was analyzed for patients with postoperative retrograde urethrogram/voiding cystourethrogram and satisfactory uroflowmetry in the same period. Uroflowmetry data points and urinary symptoms