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Letters to the Editor NOT referring to a recent journal article

Radical Prostatectomy for PSA ≥ 100 ng/ml Prostate Cancer

Remarkable long-term survival rates have recently been reported in locally advanced prostate cancers treated with radical prostatectomy [1]. Similar findings have emerged in a large retrospective series of patients with prostate-specific antigen (PSA) over 20 ng/ml receiving surgery with or without adjuvant therapy [2]. Prostate cancer patients with a PSA more than 100 ng/ml harbour a very high risk of bone metastatic disease [3] and therefore would not be elected for surgery. In a retrospective analysis of two institutional radical prostatectomy databases, we identified 26 patients with a preoperative PSA ≥ 100 ng/ml. All patients had a negative preoperative bone scan, with or without clinically node positive disease, and underwent a wide radical prostatovesiculectomy with pelvic lymph node dissection. Adjuvant or salvage treatment was administered according to institutional protocols. Follow-up data with regular PSA testing, clinical examination, and imaging studies usually performed at the time of biochemical failure or at the onset of clinical progression, were available for all cases. The Kaplan-Meier method and Log Rank test were used for the outcome analysis. Median PSA was 140 ng/ml (range 100–630), median age 66 (53–78). Clinically locally advanced disease was seen in 18/26 (69.2%), with 6/26 (23.1%) presenting with clinical nodal involvement. Pathological staging showed locally advanced disease in 24/26 (92.3%) with pN+ in 12/26 (46.2%). Median pathological Gleason score was 8 (range 6–10). Positive surgical margins were found in 22/26 (84.6%). Adjuvant and/or salvage treatment was given in 20/26 (76.9%) and 16/26 (61.5%) patients respectively, with most of the patients (22/26; 84.6%) receiving hormonal treatment at some stage during follow-up. Median follow-up was 75 mo (range 12–158). Data on the 10-yr projected biochemical and clinical disease free survivial, cancer specific survival, and overall survival are reported for all patients and categorized for pN+ and pN0 disaese in Table 1. Surprisingly, more than half of these patients were pathological N0, which showed to be the most significant outcome predictor in all cancer related outcomes.

The finding of an 88% 10-yr projected cancer specific survival in this selected very high-risk prostate cancer population where radical surgery was administered alone or as part of a multimodal treatment is intriguing and deserves attention. While the beneficial role of surgery cannot be proven by our study design, the poor utility of PSA alone to predict the disease prognosis would seem clearly emphasized in this selected series. On the other hand, in the light of the known high probability of metastatic disease for PSA level above 100 ng/ml [3], one could speculate that a significant proportion of our patients may harbour systemic disease undetectable by bone scan but potentially diagnosable by more sensitive imaging techniques currently in use, such us PET/CT [4]. Under this perspective, the current data raise the compelling possibility, for which only speculative

Table 1 – 10-yr projected biochemical and clinical disease free survivial, cancer specific survival, and overall survival of 26 radical prostatectomy patients with a preoperative prostate-specific antigen (PSA) level ≥ 100 ng/ml

10-yr projected survival	All patients (n = 26)	pN0 (n = 14)	pN1 (n = 12)	p-value
BDFS (PSA < 0.2 ng/ml)	11.3%	18.7%	8.3%	0.132
CDFS (local–distant recurrence)	47.5%	84.6%	9.7%	**0.0003**
CSS	88.7%	100%	66.7%	**0.05**
OS	54.1%	67.5%	44.4%	**0.025**

BDFS, biochemical disease free survival; CDFS, clinical disease free survival; CSS, cancer specific survival; OS, overall survival.

evidence currently exists [5], that removing the prostate in men with metastatic prostate cancer might result in a more complete and durable response to adjuvant treatment and ultimately favourably impact on survival.

Conflicts of interest: The authors have nothing to disclose.

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Clinicians are Most Familiar with Nomograms and Rate their Clinical Usefulness Highest, Look-up Tables are Second Best

Despite the relative abundance of predictive and prognostic models in urology [1–5], we are unaware of studies that formally tested the preference of clinicians for different model formats. For example, is the nomogram preferred over a look-up table or is a decision tree even better? Moreover, no study assessed the clinicians' perception of the usefulness of one format relative to another. To address these issues we performed an ad hoc survey among 45 urologists that participated in a didactic session on risk prediction during an annual section meeting of a urology association. Three model examples were presented: a look-up table, a nomogram, and a decision tree. All predicted the same end point; namely, lymph node metastases at radical prostatectomy. All used the same three predictors—clinical stage, serum PSA, and biopsy Gleason sum—which were coded in the same format. Their graphical display was projected on a screen, and it was stated that all have the same discriminant properties (accuracy of 76.6%) and that all have the exact same calibration (relationship between predicted and observed probabilities). Therefore, all three models were considered equal, except for their format.

While the example of a look-up table was projected, the participants were asked ''How familiar are you with this tool?'' The same question was then asked for the decision tree and the nomogram. Subsequently, the process was repeated with the second question ''How would you rate the clinical usefulness of this tool?'' Replies were provided through touchpad devices.

Regarding the familiarity level, 60% were familiar or very familiar with the nomogram format versus 56% for the look-up table versus 21% for the decision tree (Fig. 1). Regarding the clinical usefulness of the three tools, 74% rated the nomogram format as good or excellent versus 69% for the look-up table versus 17% for the decision tree.

Urologists are most familiar with nomograms, and most urologists consider the nomogram format clinically useful. It is noteworthy that the look-up table format was in close second place. Surprisingly, decision trees were rated the poorest.

The implications of these findings are that medical decision-making research should give strong consideration to the nomogram and look-up table formats when new models are developed. Look-up tables can accommodate fewer variables