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The role of radiotherapy after radical prostatectomy

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To the Editor

We have read with great interest and enjoyed Dr Özkanlı et al.'s well designed and well written research paper entitled "Gleason score at the margin can predict biochemical recurrence after radical prostatectomy, in addition to preoperative PSA and surgical margin status" in a recent issue of the journal (2014; 44 (3): 397-402) (1). However, we have some questions about the study. As we understand, 94 patients were included in your study and these patients were with pathologic stage T2 and T3 and 34 patients (36.2%) had positive surgical margins (PSMs). Patients with node positive disease and who received neoadjuvant or adjuvant therapy were excluded from the study. We want to learn more about the neoadjuvant or adjuvant therapy; did they receive any radiotherapy (RT) or androgen deprivation therapies (ADT)? We agree that high preoperative PSA levels, PSMs, and high Gleason score (GS) have a poor prognostic impact, and they are related with a higher rate of biochemical recurrence (BCR). Close follow-up of these patients is recommended.

As is well known, surgery, RT, and ADT are treatment choices in prostate cancer. In approximately two-thirds of men, radical prostatectomy (RP) constituted a cure, but

up to one-third of patients manifested recurrent disease (2,3). Recurrence risk is greater among men with adverse pathology such as positive surgical margins, higher GS, extraprostatic extension (EPE), and seminal vesicle invasion (SVI). Recurrence rates in post-RP patients with adverse pathology may be greater than 60% at 5 years and >60% in high-risk patients who underwent RP only (4-6). Radiotherapy as an adjuvant therapy reduces the risk of BCR, local recurrence, clinical progression of cancer, and the need for subsequent salvage therapies. Adjuvant RT (ART) is the administration of RT postprostatectomy to patients at a higher risk of recurrence because of adverse pathological features prior to evidence of disease recurrence. Salvage RT (SRT) is the administration of RT to the prostatic bed and possibly to the surrounding tissues, including lymph nodes, in the patient with PSA recurrence after surgery but no evidence of distant metastatic disease (4).

In the guidelines, ADT is regarded as the neoadjuvant therapy, with RT or adjuvant therapy (7).

In our particular conclusion, 48.9% BCR at two years is significant and RT should be added as an adjuvant therapy after the RP.

With our best regards,

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Reply to Letter to the Editor: “The role of radiotherapy after radical prostatectomy” by Aktan and Koç.

To the Editor:

We would like to thank Aktan and Koç for their interest in our recent study entitled “Gleason score at the margin can predict biochemical recurrence after radical prostatectomy, in addition to preoperative PSA and surgical margin status” (1).

Because we were interested in the risk of recurrence, all patients who had undergone adjuvant therapy (radiotherapy or hormonal treatment) before biochemical recurrence were excluded as in previous studies (2,3). The patients with biochemical recurrence (PSA ≥ 0.2 ng/mL at least two measurements) after radical prostatectomy were treated by radiotherapy and/or hormonal treatment according to risk factors including preoperative serum PSA, clinical stage, Gleason score, and pathological stage (level of extraprostatic extension, seminal vesicle invasion) in addition to surgical margin positivity (SMP).

The reported overall rates of SMP vary extremely, reflecting differences in specimen processing, diligence of the pathologist in examining the tissue, patient selection,

and surgical technique. The reported rate of SMP ranges from 11% to 37% (4).

For details regarding the patient population, 94 patients who underwent radical prostatectomy between 2001 and 2010 with at least 2-year follow-up were included. The mean and median follow-up times were more than 5 years. Furthermore, radical prostatectomy was performed by four surgeons with different surgical experience. This limitation of our study may be another reason for the high rate of surgical margin positivity and biochemical recurrence.

Although our results are promising, several limitations such as the sample size, single-center experience, and short follow-up may apply to our analyses. To date no preoperative or postoperative biomarker or histopathological finding has been shown to predict the precise probability of biochemical recurrence after radical prostatectomy. Our recent study suggests that Gleason score at the surgical margin may have an independent prognostic role for predicting biochemical recurrence after radical prostatectomy.

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