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UROLOGICAL ONCOLOGY

Inflammatory changes and the prostate

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It is indeed a pleasure to have the opportunity to comment on the article by Adamczyk and colleagues [1] dealing with the association of prostatitis in prostate biopsies and the possible relevance of this histologic finding as it relates to the follow–up and possible treatment of these patients.

Prostate cancer (PC) remains a tremendously interesting topic and we have experienced tremendous shifts in our thinking and understanding of this disease over the past few decades. As I discuss certain aspects of this paper I will take editorial license to comment on other aspects of PC beside the main subject of this article.

The PSA cutoff for a biopsy in the patient population of this article was 4. Subsequent to the data derived from the prostate cancer prevention trial (PCPT) many urologists in the United States have adopted a relative cutoff PSA value of 2.5 as a value to begin discussing the role of a prostate biopsy in the diagnosis of PC. The chance of finding PC relates to a variety of factors such as free and total PSA, PSA velocity, patient's age, rectal exam findings, PSA density, results of prior biopsies, etc. Based in part from the PCPT trial the risk of PC is about 15% for all patients with a PSA between 2.5 and 10. The other parameters can help fine tune the risk but ultimately the patient must decide on whether to proceed with this mildly uncomfortable biopsy procedure. The risk of biopsy related sepsis, although low (about 1–2%) is not to be taken lightly. The reason for the recent interest in MRI for diagnosing PC is in part related to the imprecise nature of prostate biopsies and the morbidity associated with the procedure. Although MRI of the prostate is far from perfect, the interest from patients to consider this expensive test is related to the fear of missing PC and the desire to avoid a biopsy.

The authors used only an oral quinolone for antibiotic prophylaxis prior to and following the biopsy. Most of my colleagues in the USA have altered our prophylaxis regimen due to a high rate of resistance to quinolones particularly from *E. Coli*. My preference is to have patients initiate ciprofloxacin 3 hours before the biopsy and, in addition, I give them one gram of cephalexin intramuscularly just prior to the biopsy. Following the biopsy patients continue with daily oral ciprofloxacin for 3 days. This program has reduced the sepsis rate from 2–3% to <1%.

In my view the presence of prostatitis in a prostate biopsy in an asymptomatic patient would not suggest treatment. If a patient had symptoms consistent with "prostatitis" (infrequent in my practice) I would not biopsy them until this was resolved. I rarely, if ever, prescribe antibiotics for a patient with an elevated PSA because of a presumed diagnosis of chronic prostatitis. First of all, the symptoms of perineal discomfort with or without voiding complaints, so called prostatitis or prostadynia infrequently alters the PSA and importantly antibiotics, if prescribed for this entity, will likely lead to antibiotic resistance and, thus a higher chance of biopsy related sepsis.

I note that the average PSA for all patients in this article who underwent a biopsy was 19. In this era of PSA "screening" in the US patients are referred by their primary care doctors, if their PSA is above either 2.5–4 or, if there is a change in the PSA velocity. Although the new AUA guidelines as well as the USPTF report will possibly change this practice, the average patient I biopsy because of an elevated PSA, i.e. normal DRE, has a PSA of 5. Interestingly the % of men with a positive biopsy in this article is similar to most US reports, 30%. The authors of the current article do not give the Gleason scores so we can not compare the grade and stage of diagnosed cancers between the 2 countries. One would expect more high grade and higher stage cancers with a mean PSA of 19.

My last point relates to the overemphasis on prostate biopsies and the treatment of prostate cancer. Despite the increasing data that men with low risk PC rarely die of their cancer there is a lot of overtreatment with surgery and radiation. It is not unusual for me to see men over 65 years old who have already had 2 or more negative prostate biopsy sessions because of an "elevated" PSA. Many

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of these men have several health risk factors, e.g. obesity, hypertension, cardiac and vascular problems, that far outweigh their potential risk of lethal PC. Although I am not an advocate of eliminating PSA for early detection I am concerned about overtreatment. Evidently the task forces assigned to study this issue have also concluded that the risks of biopsies and treatment outweigh the benefits of early detection and the pendulum has swung too far toward trying to find every prostate cancer no matter how small.

In some countries early detection programs are not the norm and they still have too many men with advanced stage PC at presentation. Hopefully they will learn from some of our failings and reach a proper balance between diagnosis and treatment.

References

1. Adamczyk P, Wolski Z, Butkiewicz R, Nussbeutel J, Drewa T. Inflammatory changes in biopsy specimens from patients with suspected prostate cancer. Cent Eur J Urol. 2013; 66: 252–262. ■

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