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Editorial

Dilemmas Over the Decision to Perform Repeat Prostate Biopsies

Regardless of age, patients with persistently elevated prostate-specific antigen (PSA) levels and/or a suspicious result on a digital rectal exam but with a previous history of a negative prostate biopsy result usually present a dilemma to urologists. Published reports have shown that the positive rate of repeat prostate biopsy in men suspected of having prostate cancer and at least 1 previous negative biopsy is around 10% to 35% [1,2]. Potential reasons for previous negative findings in men who have cancer detected in repeat biopsies include inadequacy of the initial biopsies (fewer cores taken) or the presence of precancerous lesions, such as atypical small acinar proliferation. As a result of concerns over missed cancer, urologists frequently resort to repeat biopsy. However, in reality, the aforementioned positive rates in repeat biopsies demonstrate that the results of most repeat biopsies will prove to be negative. In addition to causing significant anxiety, prostate biopsies can result in complications that can sometimes be severe. Some investigators have even reported that the rate of hospitalization for infection following prostate biopsies is on the rise [3]. Furthermore, in a Western series, it was shown that about 1 in 10 men refuse a repeat biopsy or require analgesia or sedation for the procedure [4]. Overall, it would be safe to say that the decision to recommend a repeat prostate biopsy is never an easy one for urologists to make.

So how can urologists overcome such a dilemma? It may just be that we are digging a hole for us to be buried in by recommending PSA testing to the wrong group of men, specifically, younger men, in the first place. A recently published American Urological Association (AUA) guideline on prostate cancer detection recommends against PSA screening in men aged <40 years [5]. Also, despite causing some controversy, the same AUA guideline states that routine screening is not recommended in men aged 40 to 54 years and at average risk. Such statements may well have been made for the following reasons: a low prevalence of prostate cancer in younger men, absence of evidence for PSA screening in younger men, and risk of harm from biopsies and treatments. Accordingly, to avoid the dilemma of agonizing over the decision to perform repeat biopsy in younger men, we should be more judicious in recommending PSA testing initially. Although we should not actively discourage PSA testing in younger men on the whole (especially among those with a family history or other risk factors), a more careful approach in PSA screening would eventually prove beneficial in lessening the dilemma over repeat biopsies. Also, newly developed markers, such as PCA3, phi, and 4Kscore (although not yet available worldwide), will likely be helpful in decision-making for prostate biopsies. In addition, multiparametric magnetic resonance imaging has been frequently mentioned to increase the probability of a positive repeat biopsy. Applications of these tools would certainly be helpful in lessening urologists' burden over repeat biopsy decisions in the future. However, unless a breakthrough occurs in the detection of prostate cancer, which allows us to do away with PSA testing completely, we will never be 100% freed from the dilemma over repeat biopsies. Despite the current overall sentiment towards PSA testing, the fear of missed tumors will always linger.

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