LETTER TO THE EDITOR

Ultrasensitive measurement of prostate-specific antigen and background noise

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Sir,

In view of the realization of the pitfalls of prostate-specific antigen (PSA) screening and the resulting increasing re-attention to the initial prognostic value of post-treatment levels of PSA and recently kinetics thereof, i.e., PSA velocity (1, 2) and doubling time (3), the recent report by Taylor, III et al. (4) of the relevance of the relationship of ultrasensitive measurements of PSA to the recurrence of cancer following radical prostatectomy is timely and of importance. However, a very brief, albeit important comment with reference to the suggestion by Taylor, III et al. (4), that detection of PSA in women is indicative of background noise in ultrasensitive measurements of PSA is inaccurate and necessary of necessary.

Be it known to all, women have a prostate, misnamed in part as Skene's paraurethral glands (5, 6). The female prostate, morphologically distinct from the male prostate being comprised of a series of glands and ducts within the wall of the female urethra, is biochemically identical to its male counterpart, including the secretion of prostatic acid phosphatase and PSA. With PSA values ranging in healthy females from undetectable levels to as high as 0.9 ng/ml (7) to 5.9 ng/ml in carcinoma of the prostate in the female (8), which in the latter promptly decreased after removal of the tumour (8) have been observed. The weight of the female prostate compared to the male prostate (the adult female prostate weighs slightly more than 5 g, representing about 20–25 % of the adult male), may account for generally lower levels of PSA in females. Nonetheless, it is their and not due to "background noise".

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