LETTERS TO THE EDITOR

THE USE OF PROSTATE-SPECIFIC ANTIGEN AS A CRITERION FOR CONDOM EFFECTIVENESS

A series of articles recently published in the Journal (1–4) reported on the use of pre- and postcoital levels of prostate-specific antigen (PSA) in vaginal fluid as a criterion for the effectiveness of condoms. The authors of course emphasized and interpreted the absence of PSA in the vagina as proof of the good quality of condoms as well as the reliability of mechanical contraception.

However, the referenced articles do not deal with female PSA (refer to Zaviacic and Ablin (5) and the references therein) that, as by the male prostate (6), is generated by the female prostate (7). Moreover, there is no mention of either a possibility of the presence of PSA in the vagina of a healthy woman or the significance of the female prostate and a woman’s sexual life in this possible vaginal PSA positivity.

The level of PSA in the serum of a normal, healthy woman is characterized by a wide spectrum of values, from those virtually immeasurable to 0.9 ng/ml (8), which approach normal reference values in males. Not only are the histologic and ultrastructural parameters of both the male prostate after puberty and the female prostate identical (9), but also the prostate discharge mechanisms are identical in both sexes (10). Besides the ejaculation mechanism (female ejaculation) in the female prostate, there also occurs continual (spontaneous) prostatic secretion via prostatic ducts into the urethra. Thus, this secretion becomes part of female urine. Small amounts of urine with the prostatic components (PSA, prostate-specific acid phosphatase, etc.) flow, under gravitation, from the urethra to the vagina (10). The existence of continual secretion of the female prostate is proved by the PSA values in normal (11) and preorgasmic urine samples (12) and by the macroenzymehistochemical findings of acid phosphatase on those parts of worn underwear that were in constant contact with the female genitals (refer to Zaviacic (10) and the references therein). In 75 percent of postorgasmic urine samples, Cabello (12) found higher PSA levels (1.49 ng/ml) in comparison with the preorgasmic urine samples from the same women. The values of PSA in female ejaculate can be more than 30 ng/ml (10, 12).

The existence of continual female prostate secretion, with recognition of prostatic components, including PSA, into the urethra and the continual flow of small amounts of urine from the urethra to the vagina under gravitation and the ejaculation accompanying female orgasm (13) or sexual arousal (10) provide a simple explanation of how the female prostatic fluid with the PSA can get into the vagina. The rhythmical coital movements and pressure of the male mem- brum into the vagina provide for easy and fast attainment of female prostatic components in the vagina. Consequently, the continual (spontaneous) secretion and the ejaculation discharging of the female prostate can be accompanied by the occurrence of PSA and other female prostatic components in the normal environment of the vagina.

On the basis of the foregoing, we cannot agree with the validity of the vaginal PSA test as a criterion for the effectiveness of condoms.

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REFERENCES
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