Correspondence

Female Prostatitis?

TO THE EDITOR: Ruben F. Gittes, MD, and Robert M. Nakamura, MD, are to be congratulated for calling attention to the urethral syndrome, perhaps the commonest urologic complaint among female office patients.[1] In fact, the figure cited of 5 million office visits annually seems far too conservative. The authors propose to attribute the urethral syndrome to infection in distal paraurethral glands ("the female prostate") based on the following factors:

- Palpation tenderness of these paraurethral sites,
- Symptomatic improvement with antibiotic treatment,
- A proposed analogy with male prostatitis, and
- Histologic inflammation in a single necropsy specimen.

Several issues are raised that question the validity of this concept, beginning with the culture-negativity of urine and urethral expressions that epitomize this syndrome. Palpation tenderness resolving with antibiotic therapy is persuasive, but another feature of the urethral syndrome must be considered—namely, a tendency for symptoms to evanesce, waxing and waning without apparent provocation. Also, patients often describe improvement during antibiotic therapy, only to have prompt recurrence on the withdrawal of therapy. Moreover, to support this concept by citing the common practice of diagnosing prostatitis based upon digital rectal tenderness without laboratory substantiation ignores the condemnation of that practice as unjustified and leading to a gratuitous waste of resources. Finally, the histologic specimen included in the report lacks any information supporting a clinicohistologic connection: this example is specious if it cannot be stipulated that the patient suffered from the urethral syndrome.

The authors refer to urethral dilatation as both condescending and not beneficial. In my experience, physicians who denounce urethral dilatation routinely underdilate, in which case benefit is absent or temporary. A caliber of 38F in adults is necessary, and mild, temporary urethral bleeding is a favorable prognostic sign. Relief is typically prompt. Benefit is reflected in the patients who voluntarily return after varying intervals for retreatment when symptoms recur. The second dilation is seldom as uncomfortable as the first.

Gittes and Nakamura may be correct in their observation, but substantiation is necessary before the expense involved in the therapy they advocate can be considered. In pursuit of this theory, they may wish to consider two intriguing factors:

- The urinary sediment of patients with the urethral syndrome characteristically contains a large number of squamous epithelial cells, as does the urine of men receiving estrogen therapy (for prostate cancer);
- Patients with the urethral syndrome and no manifestations of estrogen deprivation often benefit symptomatically from exogenous estrogen therapy; male patients with symptomatic benign prostatic hypertrophy have benefited (subjectively) from similar therapy.

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REFERENCE

1. Gittes RF, Nakamura RM: Female urethral syndrome—A female prostatitis? West J Med 1996; 164:435–438

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TO THE EDITOR: Regarding the article on the female urethral syndrome by Ruben Gittes, MD, and Robert Nakamura, MD, some of the women we see with nonspecific symptoms and no demonstrable infection by standard culture definitely need a trial of antibiotic therapy (my choice is doxycycline) before we proceed with cystoscopy to rule out interstitial cystitis.

Likewise, from the standpoint of the male so-called nonbacterial prostatitis, a few urologists in our community are evaluating these cases for possible interstitial cystitis. Several male patients whom I have taken the trouble to cystoscope under anesthesia and dilate have had definite glomerulations. Indeed, they have substantial abatement of symptoms simply from bladder dilation.[1]

Obviously, we still have a lot to learn.

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REFERENCE

1. Miller J, Rothman I, Bavendam TG, Berger RE: Prostatodynia and interstitial cystitis: One and the same? Urology 1995; 45:587–590

Jarisch-Herxheimer Reaction

TO THE EDITOR: I read with interest the article by Judy L. Flores, MD, on the treatment of syphilis,[1] but the author failed to mention an important clinical phenomenon that all clinicians caring for patients with syphilis should be aware of: the Jarisch-Herxheimer reaction. This is a systemic febrile reaction occurring in about 60% of patients treated with penicillin for syphilis.[2] It was described by

Jarisch, Herxheimer, and Krause at the turn of the century, but was initially noted in the 15th century when topical arsenic was first used to treat syphilis.[3] The reaction, typically occurring 6 to 12 hours after therapy for syphilis is initiated, consists of fever, rigors, malaise, diaphoresis, and an exacerbation of preexisting cutaneous lesions.[3,4] The Jarisch-Herxheimer reaction is more annoying than dangerous to patients, although on rare occasions patients with neurosyphilis may experience seizures, monoplegia, or hemiplegia.[4] Another possibly dangerous outcome, although rare, is inflammation of the aorta or coronary ostia in patients with cardiovascular involvement.[2,4]

The cause of the Jarisch-Herxheimer reaction is thought to be due to the death of spirochetes, which liberates toxins from the organism.[4] Early studies postulated that dying treponemes released an endotoxin similar to that of gram-negative organisms.[4] Subsequent investigators have convincingly demonstrated, using the limulus amebocyte lysate test in humans and in rabbits, that endotoxin is not released by treponemes.[5] Young and coworkers assayed serum specimens before, during, and after treatment of syphilis in 19 patients, and all specimens were negative for endotoxin. They also were able to reproduce a syndrome similar to the Jarisch-Herxheimer reaction after treatment with penicillin in rabbits infected with *Treponema pallidum* and were not able to recover endotoxin.[5] The exact cause is not precisely known, but could relate to the formation of immune complexes triggered by antigen release from dying spirochetes.[2,5]

Reactions similar to the Jarisch-Herxheimer reaction may occur in other infections, including borreliosis, brucellosis, and trypanosomiasis.[5] The Jarisch-Herxheimer reaction is typically more severe in relapsing fever (borreliosis) and may include hypotension, a decrease in cardiac output, and lactic acidosis.[4,5] Fortunately, the reaction in the treatment of syphilis is rarely of this degree and usually subsides spontaneously. Clinicians should not confuse the Jarisch-Herxheimer reaction with a penicillin allergy as this is the drug of choice. Furthermore, the onset of the reaction after treatment with penicillin may provide a clue to undiagnosed syphilis in a patient treated with penicillin for another reason.[4]

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REFERENCES

1. Flores JL: Syphilis—A tale of twisted treponemes. West J Med 1995; 163:552–559

2. Sparling PF: Syphilis, *In* Wyngaarden JB, Smith LH (Eds): Cecil Textbook of Medicine, 18th edition. Philadelphia, Pa, WB Saunders, 1988, pp 1713–1722

3. The Jarisch-Herxheimer reaction (Editorial). Lancet 1977; 1:340–341

4. Berkow R (Ed): Sexually transmitted diseases, *In* The Merck Manual. Rahway, NJ, Merck Research Laboratories, 1992, pp 127, 223

5. Young EJ, Weingarten NM, Baughn RE, Duncan WC: Studies on the pathogenesis of the Jarisch-Herxheimer reaction: Development of an animal model and evidence against a role for classical endotoxin. J Infect Dis 1982; 146:606–615