Asymptomatic gonococcal urethritis in a male transsexual female

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In a previous paper (Fiumara and Di Mattia, 1973) a male transsexual patient was described with symptomatic gonococcal urethritis. Since then, after an interval of four years, a second patient has been found, who is asymptotically infected. The incidence of surgical sex reassignment of the male transsexual in the United States is not available, but the operation is being performed at many university hospitals and it is expected that physicians will occasionally see such patients. In an attempt to understand more of the pathogenesis of gonorrhoea in these patients, the following case reports may be of interest.

Case reports

A 37-year-old, White, divorced man came to the Skin Clinic of the Boston Dispensary on 14 July 1977 with dysuria and a purulent urethral discharge of five days' duration. The Gram stain revealed many Gram-negative intracellular and extracellular diplococci and a Thayer-Martin culture was positive for gonococci recognised by morphology and oxidase reaction.

The patient was treated with 4-8 megaunits of aqueous procaine penicillin G. The blood rapid plasma reagin circle card test (RPRCT) was non-reactive. He named two female sexual contacts—Alice, a 26-year-old, White, divorced woman (contact on 4 July) and Jane, a 32-year-old, single woman (contact on 9 July).

Alice came in for examination on 18 July. She was found to be infected with gonorrhoea, her culture was positive, and she was treated.

Jane presented on 21 July. She was a 32-year-old male transsexed female who had had genital reconstructive surgery two years earlier. On examination she was a tall big-boned woman, well proportioned, with soft, white, non-hairy skin, well developed breasts (the result of silicone injections and oestro-gen), male pattern pubic hair, and reconstructed external sexual organs of female appearance (Fig. 1). Her hair was long and well groomed and her voice was pleasantly deep. There was no urethral discharge and even after milking the urethra through the new vagina no discharge could be expressed. Nevertheless a smear and culture were taken (Fig. 2). The Gram stain revealed few polymorphonuclear leucocytes and few Gram-negative intracellular diplococci. The culture on Thayer-Martin plate was positive for gonococci. Jane was treated with 4-8 megaunits of aqueous procaine penicillin. One week later the urethral smear and culture were negative.

Fig. 1 The reconstructed external sexual organs of female appearance

Fig. 2 Milking the urethra through the new vagina
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Discussion

The previous report (Fiumara and Di Mattia, 1973) summarised the psychological nature of the male transsexed patient and the surgical procedures; the reconstructed vagina is lined with stratified squamous epithelium which is resistant to infection with gonorrhoea (Fiumara, 1972). There is constant desquamation of the keratin layer and patients are advised to clean the vagina with a little oil on a swab to prevent irritation and infection. Gonococcal infection should be looked for in the urethra and specimens for laboratory examination must be taken from this site.

Unlike our other two patients (Fiumara and Di Mattia, 1973; Fiumara, unpublished), Jane had a small vaginal introitus (Fig. 3). In discussing this with her she remarked it did not interfere with sexual intercourse because she lubricated it beforehand and it stretched without discomfort.

It is not surprising that asymptomatic gonorrhoea was found in a male transsexual female. Between 3 and 15% of infected males may be asymptomatic, Handsfield et al. (1974). The male transsexual female is anatomically a male with the spongy portion of the penis amputated at the proximal end. Therefore, this portion of the urethra is lined with columnar epithelium which readily supports the invasion of the gonococcus. What the attack rate may be in these male transsexual females on exposure to a male patient with gonorrhoea is unknown. As physicians gain more experience in examining, diagnosing, and treating male transsexual females, the epidemiology of gonorrhoea in such patients will become apparent.

References