

Urethritis Associated with Isotretinoin Therapy

Sir,

Isotretinoin is commonly used in the treatment of acne vulgaris, which primarily affects young people, with a peak incidence at age 16 years (1), and will therefore often be used in those who are sexually active and may attend genitourinary medicine clinics. We report 2 cases in whom symptomatic urethritis was associated with the onset of treatment with isotretinoin.

CASE REPORTS

Case 1

A 23-year-old student presented with a 2-week history of meatal soreness, associated with a clear urethral discharge. Examination of the genitalia revealed meatal erythema but no other abnormalities, and microscopy of an urethral swab showed between 10–20 pus cells per high power field (HPF), indicative of a urethritis. *Chlamydia* was not detected by ELISA on urethral swabs and *Neisseria gonorrhoea* was not found on microscopy or culture. There was no evidence of any other sexually transmitted infection. The patient had recently started a second course of isotretinoin therapy for persistent acne vulgaris – this had been prescribed by his dermatologist in the United States. He had a regular female partner but had not had intercourse for 3 months whilst in England; on closer questioning he recalled similar urethral symptoms during his last course of treatment. He was treated with a 10-day course of Detecko 300 mg twice daily.

He was reviewed at 2 weeks when the symptoms had settled and evidence of urethritis had resolved.

Case 2

A 35-year-old engineer presented to the clinic with a 3-day history of a creamy white urethral discharge without dysuria. He had started isotretinoin therapy 1 week prior to the onset of his symptoms and volunteered that he had suffered similar symptoms whilst taking isotretinoin 1 year previously. On examination he had acne vulgaris affecting the face and upper back, and genital examination revealed a mucopurulent urethral discharge without meatitis, and non tender left inguinal lymphadenopathy. Microscopy of a urethral smear showed between 10–20 pus cells/HPF, and there were threads in the first of two urine samples, diagnostic of urethritis. Chlamydial ELISA was negative and *Neisseria gonorrhoea* was not found on microscopy or culture. Syphilis serology was negative. He was treated with a 10-day course of Detecko 300 mg twice daily. His symptoms had resolved by 2 weeks, although threads were still visible in the first urine. These had resolved when reviewed again at 4 weeks, despite continuation of isotretinoin therapy.

DISCUSSION

Urethritis in men on isotretinoin therapy has only recently been reported in the UK (2), although the manufacturers are

aware of several more cases world-wide. Adverse reactions are common and usually relate to the drying of skin and mucosal surfaces, especially conjunctiva, nasal and pharyngeal mucosa. Urethritis in both cases may therefore have been due to a direct effect of the drying on the urethral mucosa. Alternatively, drying of the urethral mucosa could lead to loss of mucosal integrity and predispose patients to the acquisition of genital infection. Although both patients were negative for chlamydial infection, other bacterial species known to cause urethritis, such as mycoplasma and ureaplasma, were not tested for and may have been implicated. In contrast to the cases reported by Kellock et al. (2) our patients both responded to treatment with Detecko, which would suggest an infective aetiology. However, in both patients this was the second course of isotretinoin, as they had relapsed following initial treatment (as can occur in ca 16% of patients (3)). Symptoms occurred early (but not immediately) on each occasion and had previously resolved spontaneously without treatment. Acquisition of HIV has been linked to the presence of inflammation of the prepuce (4) and sexually transmitted diseases (5), and the presence of urethritis may provide a route for infection. Therefore, it is important that men commencing isotretinoin should be advised about the risk of urethritis and use of condoms. Patients developing symptoms should be carefully screened for urethritis and in particular for chlamydial and gonococcal infection, ideally by genitourinary physicians, before these symptoms are attributed purely to a side-effect of isotretinoin therapy.

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