gonococcal genital infections will also have syphilis.^{1,2} Azithromycin has antitreponemal activity *in vitro* and in the rabbit model.^{3,4} Furthermore, Verdon *et al*⁵ recently described the clinical efficacy of oral azithromycin (500 mg once daily for 10 days) for treating primary and secondary syphilis. Our experience with the first case supports their finding. More importantly, the serological resolution of early latent syphilis in the second patient suggests that the single 1.0 g dose of azithromycin used for urethritis and cervicitis is also effective.

This observation has important public health implications. While penicillin-based regimens must remain the treatment of choice until long-term studies demonstrate that azithromycin prevents the late sequelae of syphilis (both patients have since received 2.4 million units benzathine penicillin as definitive treatment), widespread use of single dose azithromycin for chlamydia and gonorrhoea may fortuitously reduce the transmission of syphilis by rendering patients with concurrent syphilis non-infectious.

F J BOWDEN
B FARMER
J BULLEN
V CHAMBERLAIN
AIDS/STD Unit, Block 4,
Royal Darwin Hospital, Rocklands Drive,
Casuarina, Northern Territory 0810, Australia
I BASTIAN
Menzies School of Health Research,
Casuarina, Darwin, Australia

Address correspondence to: Dr F J Bowden.

- 1 Martin DH, Mroczkowski TF, Dalu ZA, *et al* and the Azithromycin for Chlamydial Infections Study Group. A controlled trial of a single dose of azithromycin for the treatment of chlamydial urethritis and cervicitis. *N Engl J Med* 1992;327:921-5.
- 2 Waugh MA. Open study of the safety and efficacy of a single oral dose of azithromycin for the treatment of uncomplicated gonorrhoea in men and women. *J Antimicrob Chemother* 1993;31 (suppl E):193-8.
- 3 Stamm LV, Parrish EA. In-vitro activity of azithromycin and CP-63,956 against *Treponema pallidum*. *J Antimicrob Chemother* 1990;25 (suppl A):11-4.
- 4 Lukehart SA, Fohn MJ, Baker-Zander SA. Efficacy of azithromycin for therapy of active syphilis in the rabbit model. *J Antimicrob Chemother* 1990;25 (suppl A):91-9.
- 5 Verdon MS, Handsfield HH, Johnson RB. Pilot study of azithromycin for treatment of primary and secondary syphilis. *Clin Infect Dis* 1994;19:486-8.

Syndromic management of genital ulcer disease—a critical appraisal

Control of sexually transmitted diseases (STDs) is of paramount importance in the present era keeping in mind the risk of HIV transmission.

WHO recommends use of simple algorithms for syndromic management which are based on a constellation of signs and symptoms produced by different (or a majority) of the organisms causing each of these syndromes (WHO Technical Report Series, 810, Geneva, 1991). Need for syndromic management was felt because clinical diagnosis of STDs is not always correct and time taken by laboratory tests might delay the treatment, thus prolonging the period of infectivity.

We find one of the flow charts related to genital ulcer disease (GUD) quite impractical for the following reasons:

- (1) Signs and symptoms may not be consistent or specific for diseases like transient

chancroid, herpetic chancroid, chancroidal ulcers. Ulcers of lymphogranuloma venereum and herpes progenitalis might be impossible to differentiate even by the most experienced specialists. Presence of HIV could alter the typical morphology of all GUDs.

- (2) Genital ulcers due to mixed infections might create a diagnostic and therapeutic dilemma.
- (3) In developing countries GUD related lymphadenopathy is difficult to differentiate from lymphadenopathy following tuberculosis, leprosy and infected lesions over lower limbs in people who walk bare feet especially when the genital ulcer has healed.
- (4) The flow chart does not address the problems of GUD in women, such as hidden GUD presenting as vaginal discharge, nor does it include treatment for sexual partners.
- (5) Chemical ulcers following cleansing of the genital area with antiseptics like chlorhexidine¹ as a part of prophylactic behaviour may mimic GUD/balanoposthitis of bacterial or candidal aetiology. Treatment for presumed infective aetiologies (non-diseases) would be a huge waste of precious drugs in developing countries, morals and ethics apart. With even a faint possibility of drug resistance, the consequences could be serious. Similarly treatment for traumatic ulcers, fixed drug eruption, Behcet's disease and aphthosis etc, as for GUD such as syphilis or chancroid is uncalled for.
- (6) The psychological trauma incurred by misdiagnosis of non-STDs as STDs might well cause serious disharmony in the conjugal life of patients.
- (7) False labelling of disease would generate wrong epidemiological data. This would greatly hamper formulation of pragmatic STD control programmes for the future.

Hence we believe that the stress should be on: (1) Individual assessment of cases, (2) Proper clinical supervision and guidance of junior clinicians and paramedical staff, (3) Appropriate referral whenever required.

We would welcome views and suggestions of other physicians from developing countries.

BHUSHAN KUMAR
SANJEEV HANDA
GOUTAM DAWN
Department of Dermatology,
Venereology and Leprology,
PGIMER, Chandigarh-160 012, India

Address correspondence to: Dr Bhushan Kumar.

Accepted for publication 28 February 1995

- 1 Fisher AA. Allergic reactions to feminine hygiene sprays. *Arch Dermatol* 1973;108:801-2.

An unusual cause of incontinence

A 19 year old woman was referred by her general practitioner with a four week history of urinary incontinence. Leaking occurred only during coitus, and particularly on deep vaginal penetration. On a few occasions

abrupt cessation of coitus had enabled the patient to maintain bladder control long enough to allow urgent voluntary micturition. For one month she had also had nocturia, but without daytime frequency or dysuria. A mid-stream sample of urine (MSSU) and urethral swab for bacterial culture obtained by her general practitioner showed no growth. Seven months previously she had been diagnosed as having polycystic ovary syndrome. She had never been pregnant.

On examination, the only abnormal physical finding was a large pedunculated wart almost occluding the urethral meatus (fig). Investigations excluded other sexually transmitted diseases and an MSSU was negative. After repeated cryotherapy the wart disappeared, and the incontinence resolved. Six months later she remains wart-free and asymptomatic.

Urge incontinence is the involuntary voiding of urine associated with a strong desire to micturate. In the United Kingdom, urinary incontinence affects over two million people, many of them women.¹ Sexual function is often impaired, and some studies have found that in approximately one quarter of incontinent women urine loss occurs during sexual intercourse.^{2,3} Generally, women with stress incontinence tend to leak on penetration, whilst those with detrusor instability tend to leak at orgasm. Most affected women are parous and over 40 years old. Many have no demonstrable pathological or physiological abnormality to account for their symptoms. Our patient was unusual as she was in her teens, nulliparous, experienced no incontinence unrelated to intercourse, and had a clinically obvious pathological cause. It is likely that the irritant effects generated by the urethral wart led to failed inhibition of blad-

der contraction. Many women are too embarrassed to tell their doctors that they are incontinent of urine. In view of the large numbers of women presenting to genitourinary medicine clinics with urethral infections in general and genital warts in particular, it is possible that the magnitude of this problem has not been appreciated.

D NUNNS
S P HIGGINS
H HAMAD
K R HAYE

Department of Genitourinary Medicine,
Manchester Royal Infirmary,
Oxford Road, Manchester, M13 9WL UK

1 Leading Article. *BMJ* 1978;1:61.

2 Hilton P. Urinary incontinence during sexual intercourse: a common but rarely volunteered symptom. *Br J Obstet Gynaecol* 1988;95:377-81.

3 Korda A, Cooper M, Hunter P. Coital urinary incontinence in an Australian population. *Asia Oceania J Obstet Gynecol* 1989;15:313-5.

Factors affecting reattendance rates at genitourinary medicine clinics

Anecdotal evidence suggests that many patients who attend departments of genitourinary medicine subsequently reattend. The factors which determine whether a patient returns with a new diagnosis are less clear. As the workload of genitourinary clinics increases it may become increasingly important to identify those at risk of subsequent infections so that they may be targeted for active health promotion, although it is unclear how successful this is. In an attempt to analyse these factors we looked at all patients who attended between January and December 1987 and subsequently reattended over a five year period between January 1989 and December 1993. Patients with HIV infection were excluded from the analysis.

Of the 5824 patients who attended the Department of Genitourinary Medicine at Edinburgh Royal Infirmary with a new diagnosis in 1987, 1107 (19%) reattended on a total of 2262 occasions between 1989 and 1993. A multivariate analysis using logistic regression analysis was performed to assess which factors were significant in patients who reattended with a diagnosis of gonorrhoea or chlamydia or non-specific urethritis (NSU). Gonorrhoea was diagnosed as has been described previously¹ and a diagnosis of chlamydia/NSU was made on the basis of positive cell culture from endocervical swabs in women and from the detection of greater than 10 pus cells per high power field on a Gram stained urethral smear in men, where gonorrhoea had been excluded by culture. The results of the analysis are shown in the table. Of the 15 patients who reattended with a diagnosis of gonorrhoea following a negative HIV test in 1987 five (33%) had rectal infection, compared with two (9%) out of 23 patients with gonorrhoea who had not been HIV tested when seen in 1987.

Reattendance with gonorrhoea was associated with social class and sexual orientation of the patient with an increased rate of infection in social classes 4 and 5, and in homosexual patients. Chlamydial infection or NSU were