Epidemiological Monitoring of AIDS,¹ may more appropriately describe HIV-infected patients requiring hospitalisation.

V SORIANO
E VALENCIA
F LAGUNA
J GONZÁLEZ-LAHOZ
Service of Infectious Diseases,
Instituto de Salud Carlos III,
Madrid
Spain

Address correspondence to: Dr Vincent Soriano, C/ Rafael Calvo 7, 2º A, 28010-Madrid, Spain.

1 Ancelle-Park R. Expanded European AIDS case definition. *Lancet* 1993;341:441.

Accepted for publication 14 April 1994.

***Chlamydia trachomatis* infection in males attending general practitioners**

In males, *C trachomatis* is the most common cause of non-gonococcal urethritis and cases of epididymitis and proctitis.¹ Until recently tissue culture isolation from urethral swabs was the primary laboratory procedure for detection of *C trachomatis* in males. Several non-culture methods of detecting the organism, mainly based upon immunological techniques, have replaced tissue culture in many diagnostic laboratories. The two most common techniques for detecting chlamydial antigen are direct immunofluorescence (DIF) and enzyme immuno-assay (EIA). Examination of first void urine (FVU) samples using EIA to detect *C trachomatis* antigen appears to be as sensitive as taking urethral swabs for diagnosis in men.²

We have studied chlamydia prevalence in males attending their general practitioners from whom a mid stream urine sample (MSU) was submitted for routine bacteriology for suspected urinary tract infection. Direct microscopy and culture were first performed. Samples which had more than 5 pus cells per high power field but no bacterial growth were tested for chlamydia antigen in an EIA (Dako) and all repeatedly reactive samples were confirmed by DIF using fluorescein labelled monoclonal antibody (Syva, Microtrak). The DIF was read by two observers. A preparation showing at least two or more chlamydial elementary bodies (EB) was defined as positive.

A total of 293 patients were studied over a period of 18 months. Eighteen samples were positive for *C trachomatis* (table). A further four samples were reactive in the EIA but could not be confirmed by DIF and were

therefore considered as negative for the purpose of this study.

Overall, 6% patients with sterile pyuria were positive for *C trachomatis*. However, 15/18 (83%) were from males under 30 years; 15% of all urines submitted from that age group were positive for chlamydia. In an earlier report³ 19% of patients with sterile pyuria were reported as chlamydia positive but there was no information on type or age distribution of the patient population. It is possible that dysuria and pyuria in the patients we studied was an indication of urethritis rather than UTI. Chlamydial infection was not suspected in these patients as urethral swabs were not submitted. Asymptomatic or unsuspected chlamydial infection is an important link in spread of infection. Many of these patients may not perceive themselves at risk or may be reluctant to attend genitourinary clinics. Although urethral swabbing is considered by many as invasive, a urine sample is a non-invasive sample and simplifies the investigations for *C trachomatis*. In our opinion routine testing for *C trachomatis* of urine samples with sterile pyuria from males, especially under 30 years of age, is of clinical benefit. The relationship between patients' presenting symptoms and chlamydia infection needs to be investigated further. Many general practitioners already screen women for chlamydia infection, and the comparative sensitivity of urine samples makes the diagnosis of chlamydial infection in males easily accessible.

G KUDESIA
P M ZADIK
M RIPLEY
Regional Public Health Laboratory,
Herries Road, Sheffield S5 7BQ, UK

Address correspondence to: Dr G Kudesia

- 1 Taylor-Robinson D, Munday PE. Chlamydial infections. In: Oriel JD, Waugh M (ed) Anglo-Scandinavian Conference on Sexually transmitted diseases. London: Royal Society of Medicine Services Ltd, 1988:3-12.
- 2 Chernesky M, Castriciano S, Sellors J, et al. Detection of *Chlamydia trachomatis* antigens in urine as an alternative to swabs and cultures. *J Infect Dis* 1990;161:124-6.
- 3 Matthews RS, Wise R. Non-invasive sampling method for detecting *Chlamydia trachomatis*. *Lancet* 1989;i:96.

Accepted for publication 21 March 1994.

Genital ulceration secondary to Epstein Barr virus infection

We wish to report the case of a 13 year old girl who presented to the Christchurch Sexual Health Centre in January 1994 with marked genital ulceration secondary to an acute Epstein Barr virus (EBV) infection. She had been previously well and was on no current medication. She was not sexually active and denied oral-genital contact from a stable boyfriend who himself was asymptomatic.

She presented with fever and dysuria and examination of the vulva revealed three very large deep genital ulcers on the labia minora which had vivid purple borders. Shotty inguinal lymph nodes were present and her

Age distribution of patients with C trachomatis infection

Age in years	No. of patients tested	No. positive (%)
All	293	18 (6)
≤ 30	99	15 (15)
≤ 40	158	17 (11)
> 40	135	1 (0.7)

cervical nodes were palpable but non tender. The rest of the general examination was normal at this stage.

Swabs from the ulcer for herpes simplex identification using direct fluorescent antibody tests were negative. Bacterial swab from the ulcer base grew only *Staphylococcus aureus*. Vaginal swabs were negative for trichomonas, candida and *Neisseria gonorrhoeae*. Throat swab showed commensal flora only. Syphilis serology was negative and an initial monospot test for glandular fever was negative. A full blood count was normal with a left shift in the neutrophils. ESR was 6 mm in 1 h.

Treatment was commenced with topical lignocaine gel which afforded little relief and a five day course of acyclovir tablets, 200 mg five times a day, was started.

Over the next few days the patient developed more classic symptoms of Epstein-Barr Virus infection with marked generalised lymphadenopathy. Her tonsils became covered in a white exudate and she developed an atypical lymphocytosis in the peripheral blood film. Throat swab for bacterial and other respiratory viruses and mycoplasmas were negative and stool virology for enteroviruses was negative too. Serological testing for EBV using the specific IgM-VCA now gave a positive result, confirming the recent infection with EBV. Herpes Complement Fixation test on paired sera showed no rise in titres over this time, and herpes cultures were negative.

We were interested in this case for a number of reasons. The young girl consistently denied penetrative sexual intercourse or oral-genital contact and yet there was always doubt in the practitioners' minds who saw her that this had to be a primary genital herpes and consequently she was not totally believed. Considerable tension was put on the mother/daughter relationship because of this. One physician who saw her also raised a query of sexual abuse.

The clinical course was also interesting in that the initial symptoms were of marked genital ulceration, rather than the classic glandular fever pharyngitis. This is different from an otherwise similar case reported in 1977¹ where tonsillitis and genital ulceration were the presenting symptoms and the diagnosis of glandular fever was more apparent from the onset. In our patient the initial tests for EBV on a peripheral blood film and monospot test were negative and this confused the picture more and made the presumptive diagnosis of herpes simplex infection more likely.

In retrospect the real clue to the correct diagnosis was given by the colour of the ulcers. The appearance of deep ulcers with vivid purple borders has been described once before in relation to EBV infection.²

Control of pain relief and treatment proved difficult in this patient. She found little relief from the lignocaine gel, which is usually a useful anodyne in herpes simplex infection but she stated she felt much better with the commencement of acyclovir; this may be coincidental but acyclovir is known to have a weak effect against EBV infection.

Genital ulceration secondary to Epstein Barr Virus is not well reported in medical textbooks and to date we could find only two references to this in the past medical literature. Some venereology textbooks do not mention it at all, referring only to the vague term of Lipschutz ulceration.^{3,4} We believe that though primary herpetic vulvitis is very common, this case highlights the need to keep the differential diagnosis much wider, particularly when on taking the history, sexual abstinence is constantly declared. A useful clinical clue to EBV ulceration would appear to be the characteristic dark edge to the ulceration.

G MCKENNA
SHAN EDWARDS
HILARY CLELAND
Christchurch Hospital, Private Bag 4710,
Christchurch, New Zealand

- 1 Brown ZA, Stenchever MA. Genital ulceration and infectious mononucleosis: report of a case. *Am J Obstet Gynaecol* 1977;127:673-4.
- 2 Portnoy J, Ahronheim GA, Ghibu F, et al. Recovery of Epstein Barr virus from genital ulcers. *N Eng J Med* 1984;311:966-8.
- 3 *Sexually Transmitted Diseases. A Textbook of Genitourinary Medicine*. Csonka GW, Oates JK, eds. London: Balliere Tindall, 1990.
- 4 Berlin C. The pathogenesis of the so-called ulcus valvae acutumet. *Acta Dermatol Venerol* 1965;45:221-2.

Accepted for publication 12 April 1994.

Are doctors in genitourinary medicine clinics perceiving the psychological impact of recurrent genital herpes?

The severe psychosocial problems arising in certain patients with recurrent genital herpes infections (HSV) have been well described.¹⁻⁵ These can include depression,^{1,6-8} anger and hostility,⁶⁻⁹ and a lower self-esteem, bringing about feelings of shame and social insecurity.^{1,7-8} Such problems are compounded by the genital location of the infection, the absence of a cure, the latency of the virus, the recurrent nature of the symptoms, and the social stigma that surrounds the disease.¹ A recent study by Carney, et al¹⁰ confirmed the view that suppressive acyclovir taken over a twelve months period is an aid to reducing illness concern and anxiety in patients who show emotional dysfunction because of recurrent genital herpes.

The extent to which doctors working in genitourinary (GU) medicine clinics are aware of psychosocial problems associated with genital HSV, is clearly of importance in the provision of effective care. Before any treatment strategy (including the use of acyclovir) can be initiated, the doctor and patient need to be able to communicate about the presence of psychosocial problems. Russell et al¹¹ found that the duration of GU doctors' clinical experience influenced their management of patients with recurrent genital herpes.