Are all genital *Chlamydia trachomatis* infections pathogenic? A study in men

Chlamydia trachomatis infection of the genital tract is initially mild and most sufferers do not know they have the infection.[1] However, over a period of time untreated infections may be associated with considerable pathology.

During a recent prospective survey of 500 men presenting in this department we recorded the Gram stained microscopy results from urethral swabs. These were scored by the pathologist who had no knowledge of the patient. They were scored on a scale of 1–5, corresponding to 0, 1–4, 5–9, 10–14, and >15 polymorphonuclear leucocytes (PMNLs). The results were later correlated with the routine chlamydia ELISA testing. The results are given in table 1.

It can be seen that in the chlamydia positive men 34% do not have urethritis, defined as >5 PMNLs per high power microscopy field. Similarly, urethritis was found in 22% of men who were non-chlamydia, non-gonococcal (non-GC). This clearly confirms that chlamydia infection does exist in the absence of urethritis. Furthermore, this 34% did not correspond with asymptomatic infection; 55% were symptomatic and 45% asymptomatic. Likewise in those with urethritis, 57% were symptomatic and 43% asymptomatic. The most common symptom was discharge and the peak duration was 21 days. Of the total chlamydia positive group 16% had neither symptoms nor urethritis.

Is it therefore possible that not all chlamydia infection leads to pathology and morbidity? Perhaps the non-inflammatory serovars are not harmful and do not produce the pathology that others do.[2] Evidence does exist which suggests that different serovars do produce different pathology.[3 4]

Of the 22% of men who had non-chlamydia non-GC non-specific urethritis it seems highly likely that these will be due to *Mycoplasma genitalium*.[5] In future we intend to test for *Mycoplasma genitalium* and to compare the pathology that these two organisms produce.

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Table 1 Microscopy

	Chlamydia positive, non-GC		Chlamydia negative, non-GC	
PMNLs	No		No	
0	9		284	
1–4	6	Total 34%	55	Total 78%
5–9	13		52	
10–14	12		21	
>15	4	Total 66%	21	Total 22%

Follow up of patients who have been recently sexually assaulted

Follow up rates for victims of sexual assault have traditionally been low, ranging from 10%[1] to 31%.[2] Rates improved if a follow up appointment was arranged at a genitourinary medicine clinic (GUM) clinic—50% of the 70% of patients for whom an appointment was made.[3]

FAMSAC (Forensic and Medical Sexual Assault Care) is a medical sexual assault service that has been integrated into an existing sexual health clinic for the past 19 months. A total of 114 sexual assault patients have used the service since November 2001(106 females, 8 males). Consent for follow up contact from the nurse coordinator of FAMSAC is sought at the initial consultation; this occurs in the first week after the report of sexual assault.

The following elements of care are addressed at the follow up visit:

- Follow up screening for sexually transmitted infections and hepatitis B vaccination (initiation or continuation)
- Follow up pregnancy testing as necessary (emergency contraception is given at the initial medical examination)
- Management and follow up of injuries as necessary
- Referral to counselling services (patients are offered immediate independent support at the time of medical examination)
- Discussion of legal matters (police action, victim's compensation, etc)
- Health promotion information and safety awareness strategies.

Patient follow up is the responsibility of the nurse coordinator with medical support as required, other duties include organising the preparation of legal reports, court appearances, and support of the medical officers ensuring continuity of care for the patient and minimal delay in the legal process.

To date we have contacted 97/114 (85%) of our patients. These rates are significantly higher than those reported by Herbert,[1] who reports a loss to follow up of 46% within 24–48 hours. This may be due in part to better access to telephones since her 1988–90 study—53% of our patients own a mobile telephone and 80% of patients gave a home contact telephone number. A total of 17 patients were unable to be contacted.

We offer a further opportunity for contact 3 months after the assault. To date 73 patients have been eligible; of these 59 (80%) have been contacted and 39 have attended (66%). Three patients who received HIV prophylaxis were offered a 6 month follow up appointment; all of those have attended.

The sexual health clinic appears to be an ideal venue for follow up of these patients, who appear to be at higher risk of acquiring a sexually transmitted infection.[4] The nurse coordinator model has enabled the follow up of patients at higher rates than previously reported.

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Patients lost to follow up: experience of an HIV clinic

The National Strategy for Sexual Health and HIV aims to reduce the pool of undiagnosed HIV infection in the United Kingdom.[1] Potential benefits of earlier diagnosis include timely initiation of highly active antiretroviral therapy (HAART), prevention of complications of HIV, screening for STIs that are known to enhance HIV infectivity,[2] and psychological support. Patients may not realise these benefits if they are lost to follow up (LFU). Previous studies have found associations between frequent non-attendance (as distinct from LFU) and less severe illness,[3] drug addiction,[4] and patients' health beliefs.[5]

We studied the case notes of all surviving patients who had enrolled in our HIV clinic within a 15 month period but had not received medical care for 12 months or more. Patients were excluded if they had been transferred to other centres or if the case notes were unavailable. For each case, one control was matched for date of first attendance. Data including demographics, virological and immunological markers, antiretroviral therapy, and psychological and social factors were collected from the notes using a standardised proforma.

Ninety four cases were found. LFU patients were younger than controls (table 1), with a trend towards more patients being born outside the United Kingdom. Cases were about half as likely to be on HAART than controls (RR 0.46, 95% CI 0.32 to 0.66). This