Letters to the Editor

Human papilloma virus in condyloma acuminata of the anus

Carcinoma of the anal canal is rare, but evidence suggests that an increasingly high incidence occurs in male homosexuals.¹ It has been reported that carcinoma in situ in the epithelium of the anal canal is more common in patients with condyloma acuminata,² and human papilloma virus (HPV) infection is considered to be a risk factor.³ The association of certain HPV types (particularly HPV16) with in situ and invasive carcinoma of the penis,⁴ and cervix⁵ and with in situ carcinoma of the anorectal area in women with multicentric neoplasia of the lower genital tract⁶ has been shown to be significant.

In a study of homosexual, bisexual, and heterosexual patients with persistent perianal and intra-anal condyloma acuminata HPV types 6 and 11 (which are the commonest types found in condylomas) were detected in 75 of 105 lesions from 17 heterosexual and 16 homosexual or bisexual men. HPV6 and HPV11 occurred in both groups with about the same frequency (Table). HPV16 was shown in nine lesions from five patients (Table). Condylomas containing HPV16 in the homosexual and bisexual group were perianal (four lesions) and intra-anal (four lesions), while in the heterosexual group the condyloma was on the perineum.

The histology of the lesions containing HPV16 was similar to that of the general series in three patients and showed typical filiform, well differentiated squamous cell papillomas. Keratinisation was heavy in perianal tumours but absent from intra-anal tumours, which tended to be flatter. In two cases the number of mitoses was obviously greater, and there were abnormal cell forms, intracellular keratinisation, and loss of the usual maturation of the epithelium towards the surface. In the heterosexual patient infected with HPV16 perineal and perianal condylomas recurred almost two years after the initial presentation and required extensive further surgery.

Although the numbers in this study were small, the finding of HPV16 in mitotically

active and recurrent condylomas of the perianal and anal area and the previous reports of an association between this viral type and genital tract tumours suggests that careful follow up of patients infected with HPV16 may be indicated.

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Sample storage and monoclonal antibody ELISA based technique for detecting Chlamydia

Chlamydia trachomatis is an important human oculogenital pathogen. The availability of a rapid, accurate, and cost effective laboratory diagnostic technique for detecting the presence of *Chlamydia* is becoming increasingly important. New rapid methods, based on antigen detection by monoclonal antibodies have recently been developed. These are: the direct

immunofluorescence test; enzyme immunoassay techniques.

The immunofluorescence test is relatively simple, specific, and sensitive with a good microscope and a skilful operator.^{1,2} It is, however, time consuming and tiring to examine large numbers of slides per session. Alternatively, many commercially available kits based on the enzyme linked immunoassay (ELISA) technique have been described for semiautomated mass screening tests.^{3,4}

The ELISA method will be of special value to hospitals who use the immunofluorescence test method routinely and who are under ever increasing pressure to provide a *Chlamydia* diagnostic service for a high proportion of the population. Increasing availability of the service could bring the additional benefit of focusing attention on *Chlamydia* infection as an important sexually transmitted disease.

We evaluated the effect of storing the specimen for several days before testing on the quality of the *Chlamydia* Zyme results (Abbott). The manufacturers advise not to delay testing the sample for more than five days after collection as this may reduce the sensitivity of the test. The reduced sensitivity is probably caused by the enzymatic degradation of the *Chlamydia* antigen. Our study aimed to see if specimens tested on day 5 gave comparable results to those tested on day 1 after collection.

Duplicate endocervical and urethral swabs were taken from 155 men and women who attended a sexually transmitted disease clinic. The swabs were labelled first and second, respectively. Of the first 65 patients, both swabs taken were tested on the day of collection to assess the quality of the specimens (Table 1). Of the remaining 90 pairs of swabs received, one (either the first or second selected at random) was tested on the first day of collection and the other was posted to the virology department and stored in a refrigerator (2-6°C), to be tested on the fifth day after collection. This was to simulate the conditions for specimens arriving by post from different clinics.

Table 1 shows that of the 65 pairs of swabs examined on day 1, 61 (93.8%) paired

Table Patients with typed HPV viral DNA in condyloma acuminata lesions

	Heterosexuals (n = 17)	Homosexuals and bisexuals (n = 16)
HPV 6/11	10	12
HPV 16	1	4

Table 1 All paired samples tested on same day

	Total No of paired swabs tested
Both results negative	44
Both results positive	17
Results showing discrepancy	4
Total	65