(foscarnet) are effective in slowing the progress of CMV retinitis;[2 3] however, neither is free from toxicity. Both drugs require life-long intravenous administration and ganciclovir may cause bone marrow suppression, while foscarnet may cause renal impairment.[4] We have retrospectively reviewed our experience of CMV retinitis over the period from January 1986 to August 1990 in order to examine survival trends, rates of relapse and complications of treatment.

CMV retinitis was diagnosed on the basis of fundoscopic examination which showed perivascular haemorrhage, exudates and/or periphlebitis typical of CMV retinitis, in 46 patients (45 were homosexual men and one was a bisexual man). Mean age at diagnosis was 36·4 years. All patients received ganciclovir at an initial dose of 10 mg/kg/day for 1 days, followed by maintenance therapy of 5 mg/kg/day using a central venous Hickman catheter. A fall in haemoglobin to below 8 g/dl, total white blood cell count below 1×10^9/l, or platelet count below 20×10^9/l was regarded as unacceptable toxicity. Foscarnet therapy was introduced either in the event of haematological toxicity to ganciclovir or failure of response to ganciclovir with evidence of progressive retinitis.

Median survival following the diagnosis of CMV retinitis was 7 (range 1 to 29) months and did not change significantly over the study period. In two patients CMV retinitis was the presenting AIDS diagnosis; 44 patients had a previous AIDS defining diagnosis.

Complications arising as a result of treatment were common. Only 12 of the 46 cases studied reported no further deterioration in vision and experienced no complications of treatment. This subgroup had a median survival of five months. Overall, haematological toxicity occurred in 16 patients; in 11 haemoglobin levels fell below 8 g/dl, necessitating discontinuation of ganciclovir treatment, with or without transfusion; three patients developed thrombocytopenia, two as part of a pancytopenia and one as an isolated phenomenon requiring platelet transfusion. All these patients recovered adequate haematological function when ganciclovir was stopped. One patient suffered severe nausea and vomiting after the introduction of ganciclovir and elected to stop treatment. Problems related to venous access occurred in nine patients. Hickman line sepsis occurred in five, in two of these *Staphyloccocus aureus* was isolated as the causal organism and in two *Staphyloccocus epidermidis*; in one patient it was necessary to remove the central venous line and administer ganciclovir via a peripheral cannula. Axillary vein thrombosis occurred in four patients; three were successfully treated by anticoagulation, in one the line was removed. One Hickman line had to be resited due to intolerable discomfort at the original insertion site.

Therapy was changed to foscarnet in nine cases; in four this was because of haematological toxicity and in five because of progressive retinitis. Four of these five patients also experienced toxicity from foscarnet. One patient developed acute renal failure three days after starting therapy, another experienced severe vomiting and hypokalaemia, one developed penile ulceration and one became hypercalcaemic, in all cases it was necessary to stop foscarnet treatment.

In our cohort survival following a diagnosis of CMV retinitis did not improve from 1986 to 1990, despite the introduction of zidovudine and primary and secondary prophylaxis against *Pneumocystis carinii* pneumonia. The median survival of seven months is consistent with data from other studies.[5] Overall, less than one quarter of our patients were treated without complications or progressive disease.

Since the completion of this study a number of changes in clinical practice have been introduced. It has now become standard practice to discontinue zidovudine therapy whilst patients are taking high dose ganciclovir, reducing the potential for drug induced myelotoxicity.[6] The introduction of pre-prepared ganciclovir, with the dose individually tailored to the patient's requirements by the manufacturer removes the need for the patient to draw up his/her own drug and may reduce the risk of Hickman line sepsis. Finally CMV resistant to standard therapy and relapsing disease may now be treated with concomitant ganciclovir and foscarnet, although the success of this therapy is yet to be evaluated.

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Oral sex and recurrent vulvo-vaginal candidiasis

The aetiology of recurrent vulvo-vaginal candidiasis (VVC) is not well elucidated. Predisposing factors such as pregnancy, diabetes mellitus, cortico-steroid therapy, severe debilitation, immunosuppression and even the wearing of restrictive clothing are well recognised.[1] None of these factors, however,

can be identified in the majority of patients with recurrent VVC.[2] The intestinal tract has been implicated as a reservoir from which the vagina is repeatedly reinfected.[3] Nevertheless, simultaneous oral and vaginal treatment has not eliminated recurrences[4] and vaginitis due to *Candida albicans* frequently recurred in the absence of positive rectal cultures.[5]

Colonisation of the vagina and oral cavity with *Candida albicans* may recur after treatment[2 3] and an increase in recurrences after cessation of oral treatment has been reported.[6] The finding of positive penile cultures in 25% of the male partners of women with VVC may be the consequence of the vaginal infection rather than the cause, since studies failed to demonstrate significant reduction in the rate of reccurent VVC after topical antifungal treatment of the male sex partners.

We investigated the possible correlation between recurrent VVC and the practice of oral sex (fellatio/cunnilingus), considering the practice as the possible vehicle for transferring *Candida albicans* between the couple.

Investigation was via a retrospective controlled study, whereby female patients in whom three attacks (or more) of VVC had occurred during the previous twelve months were included. The diagnosis of recurrent VVC was made either by the patient's general practitioner, gynaecologist and/or genitourinary medicine physician, on the bases of clinical assessment, microbiological investigations and/or therapeutic cure. Patients with known predisposing factors to candidiasis as discussed previously were excluded.

Twenty seven patients with recurrent VVC as defined earlier, who attended the Department of Genitourinary Medicine at the Coventry & Warwickshire Hospital were entered into the study. A control group of 27 patients attending the clinic during the same period of time, and without a history of recurrent VVC were matched for age, method of contraception and number of partners (table 1).

Of the 27 patients with recurrent VVC, 25 admitted to the practice of oral as well as vaginal sex while the remaining two admitted to the practice of vaginal sex only (table 2).

In the control group, eight patients admitted to the practice of oral as well as vaginal sex and 19 to the practice of vaginal sex only. Statistical analysis of these two groups of patients using the Chi square test revealed a significant difference ($p < 0.001$) between the two groups, when comparing the incidence of recurrent VVC and oral sex.

Table 1 The clinical correlates

	Study group	*Control group*
Age range	18–53	18–44
Mean	26·96	26·11
Contraception:		
*OCP	12 patients	13 patients
Sheath	4	4
Sterilization	3	3
Vasectomy	1	1
Diaphragm	1	1
Hysterectomy	1	1
Cap/Jel	1	1
Nil	4	4
Sex partner:		
Regular	24	24
Casual	3	3

OCP = Oral contraceptive pill

Table 2 The incidence of sexual practices

	Recurrent VVC	*Control group*	*Total*
O and V sex	25	8	33
V sex only	2	19	21
Total	27	27	54

Chi square = 19·94
O: oral, V: vaginal.

We conclude that the practice of oral sex may contribute to recolonisation of the vagina from the oral cavity and hence predisposes to the recurrence of vulvo-vaginal candidiasis. The use of the sheath and/or abandoning the practice of oral sex was associated in one study with a decrease in incidence of recurrences,[8] which appears to add support to our hypothesis.

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Cervical cytology in prostitutes of Bombay (INDIA)

Sexually transmitted diseases (STDs) form a global health problem since they cause acute and chronic diseases in adults and morbidity in neonates. These infections can be diagnosed by using a number of definitive diagnostic methods beginning from a simple wet smear to sophisticated techniques like DNA hybridisation or electronmicroscopy. However each method has some advantages and disadvantages and many are expensive or technically difficult. Papanicolaou smear is a well established screening technique available for the diagnosis of cervical cancer and intraepithelial neoplasia (CIN). This technique has an additional advantage in the diagnosis of several infections including herpes simplex virus (HSV), human papilloma virus (HPV), *Trichomonas vaginalis* (TV), anaerobic vaginosis (AV) and candidiasis.[1–3] It is known in developed countries that the prevalence of CIN is higher in prostitutes compared with the