Vulval ulceration associated with foscarnet

H B Lacey, A Ness, B K Mandal

Introduction
Foscarnet is a drug used in the treatment of cytomegalovirus (CMV) infection which increasingly, is a cause of significant disease in patients immunosuppressed as a result of infection with the Human Immunodeficiency Virus. We describe, what is to our knowledge, the first case of vulval ulceration secondary to the use of foscarnet.

Case report
A 34 year old woman with AIDS (CDC IV C1 disease- extrapulmonary TB April 90) developed CMV retinitis in February 1991. She was treated with foscarnet (200 mg/kg/day after a 20 mg loading dose) given intravenously through a Hickman central line. She was receiving concurrent treatment with oral fluconazole and nebulised pentamidine for candida and pneumocystis prophylaxis, acyclovir to suppress recurrent genital herpes, AZT, and rifinah. There had been no variation in this regime over the preceding 3 months. Fourteen days after the commencement of foscarnet treatment she developed multiple, shallow, painful ulcers on both inner and outer aspects of the labia minora, accompanied by a non offensive vaginal discharge. Screening tests for N gonorrhoeae, C trachomatis, candida, T vaginalis and bacterial vaginosis were all negative. Cultures for herpes simplex virus from the ulcers were negative as were initial and 3 month follow up serological tests for syphilis. A course of metronidazole was given on an empirical basis but had no effect on her symptoms. The patient was most reluctant to submit to a biopsy. The foscarnet was discontinued 20 days after commencement because of a deterioration in renal function. The genital ulcers and discharge resolved spontaneously within 4 days of cessation of therapy. The retinitis was then treated with ganciclovir (DHPG), during which the AZT was discontinued initially and later reintroduced at a dose of 300 mg daily. Deterioration in visual acuity 6 months later prompted a reintroduction of foscarnet. The genital ulcers recurred on the 8th day of treatment. The foscarnet was discontinued after the 11th day of treatment because of nausea and a deterioration in renal function, and the ulcers resolved within 3 days of drug withdrawal. Ganciclovir has been reintroduced and the retinitis appears to be static at present.

Discussion
Penile ulceration has been described in association with foscarnet therapy but vulval ulceration has not been reported previously. Fixed drug eruption or a contact dermatitis are suggested causal mechanisms. As the drug is excreted unchanged in the urine a local irritative effect seems plausible, especially as all reports of ulceration have occurred early on in treatment when high dose regimes are used. Exclusion of T pallidium infection using dark ground microscopy was not performed as the patient had been sexually abstinent for 2 years and her baseline serology had been negative. This patient had previously been found to have genital HSV; however, the negative culture and concurrent foscarnet treatment makes recurrent HSV unlikely. Challenge with foscarnet precipitated a recurrence of the ulceration and confirms causality. The ulceration alone does not necessitate withdrawal of foscarnet therapy as resolution of the ulcers has been reported when patients have been on maintenance treatment.