

Stevens-Johnson syndrome. An independent assessment of a random 25% sample confirmed the reports in over 90% of cases. A survey of the 40 reporting doctors identified "forgot/too busy" (4), unavailability of forms (18), and uncertainty about reporting system (6) as main constraints in reporting. The fee was an incentive for 32. In the six weeks after withdrawal of the fee only 30 reports were received by the registrar.

Comment

Enhanced rates of reporting drug reactions will improve overall drug assessment, reduce bias, and speed earlier detection of serious toxicity with new drugs. Over the past six years our 800 bed hospital (15 000 admissions yearly) has generated almost 0.2% yellow cards per patient. Offering a fee increased the rate of reporting by almost 50-fold, to 9.7%, whereas the pharmacist's survey detected a rate (5.4%) comparable to that in previous studies.¹ Nevertheless, it identified a potential source of additional reports—nurses.

In the fee study we were unable to distinguish the value of reporting to an individual colleague, which we believe to be important, and the contribution of the fee, but the number of reports fell substantially after withdrawal of the fee. Two constraints—availability of yellow cards and lack of information on what to report—should be remediable. To counter the main

constraint, "lack of time/forgetfulness," we can try only to ensure that reporting of reactions becomes an integral part of patient care.

Reporting fees are used in collecting other medical information such as notifiable diseases. We regard the use of a fee to stimulate reporting as an additional tool in drug assessment. Not only did use of the fee greatly enhance the number of reports, producing almost the equivalent to the previous six years' reports within six weeks; it also revealed many serious reactions, including those associated with newer treatments. In the normal course of events these reactions go unreported. We also introduced recently qualified doctors to the reporting system: 48% of the target group (in our case junior doctors) reported reactions over six weeks compared with a figure of 16% over 10 years for the current system.¹ Further evaluation of the use of a reporting fee is warranted.

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Women's knowledge of their HIV antibody state: its effect on their decision whether to continue the pregnancy

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Little is known about the attitudes of women infected with HIV towards pregnancy and whether they decide to continue a pregnancy or terminate it. It is often assumed that a high proportion of women who find that they are infected will terminate their pregnancy because of the risk to the baby, the possible risks to themselves, and their potentially limited life span. The main risk factors for HIV infection among women in Edinburgh are intravenous use of drugs and being the sexual partner of an infected drug user.¹ We studied the decisions made about pregnancy in all women with these risk factors.

Patients, methods, and results

A detailed community based record has been created for all pregnancies in women with the above risk factors whose HIV antibody state is known.^{1,2} Great care is taken to ensure both completeness and confidentiality of this record. We excluded pregnancies that spontaneously aborted, those confirmed before January 1986, and those in women who did not know before 22 weeks or termination whether they were positive for HIV antibodies. We thus studied 163 pregnancies. Standard counselling was provided by several doctors and counsellors.

Induced abortion was common in both the women with and without HIV antibodies (table). Although a higher proportion of the women with HIV antibodies had induced abortions, the difference was not signifi-

cant ($\chi^2_c = 1.22$, $p > 0.20$). Forty four women knew that they were positive for HIV antibodies when they became pregnant, and 21 of these had the pregnancy terminated. HIV infection was the main or only reason for termination in at least nine pregnancies: two of the women had AIDS and two had other illness related to HIV infection. Twenty five women were found to have HIV antibodies during pregnancy and knew the result before 22 weeks. Ten of these women had termination of pregnancy, but nine had previously requested abortion on other grounds and had been tested at that consultation. All 15 women who were found to have HIV antibodies when they attended the antenatal clinic continued their pregnancy. The 38 women who continued their pregnancy despite knowing that they had HIV antibodies in early pregnancy did so because they were currently in good health, desired to have one child, were against abortion, and knew women whose children were well and apparently not infected.

*Outcome of pregnancy in women who were intravenous drug users or sexual partners of drug users positive for HIV antibodies**

	Total No of pregnancies	No (%) of induced abortions	95% Confidence interval (%)
Women positive for HIV antibodies	69	31 (45)	33 to 57
Tested before pregnancy	44	21 (48)	32 to 63
Tested during first pregnancy	25	10 (40)	21 to 61
Women negative for HIV antibodies	94	33 (35)	26 to 46
All women	163	64 (39)	31 to 47

* Spontaneous abortions and women who did not know their antibody state before 22 weeks of pregnancy were excluded.

Comment

The combination of pregnancy and HIV infection can necessitate difficult decisions. The women we studied had a high rate of induced abortion, whether or not they were infected with HIV; the rate was nearly three times that in the city's overall population. Finding during pregnancy that they had HIV anti-

bodies, and subsequent counselling, did not, however, alter the women's original intention. When the pregnancy was wanted the desire to have the baby overrode all other considerations. Many women were influenced by their lack of clinical illness and a belief that there was a low risk to the child, gained from local experiences and newspaper reports. The early experience locally has been unusually favourable, and as this changes so also may the perception of risk and the number of terminations.

The advantage of our study is that it was population based and hence independent of any particular source of recruitment. Like studies in New York² (A Sunderland *et al* fourth international conference on AIDS, Stockholm, 1988; abstract No 6607), it shows that many women with HIV infection do not see this as a reason to terminate a wanted pregnancy. Whether this

will remain true when clinical illness in women and babies is more apparent, or when women with different risk factors become pregnant, is being studied.

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Lingual cellulitis causing upper airways obstruction in neutropenic patients

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Lingual cellulitis is extremely rare. When it develops in neutropenic patients the inflammation and associated swelling of soft tissue can advance so quickly that a prompt operation and medical treatment are required to secure the airway. We report on two immunocompromised patients in whom lingual cellulitis resulted in obstruction of the upper airways that required emergency insertion of a laryngotomy tube.

Case reports

Case 1—A 46 year old man with acute myeloblastic leukaemia underwent autologous bone marrow transplantation at this hospital. Six days later, while pancytopenic (haemoglobin concentration 100 g/l, white cell count $<0.1 \times 10^9/l$, platelet count $40 \times 10^9/l$), he became feverish (38.4°C) and had oral discomfort. Over the next six hours his tongue enlarged greatly, preventing him from swallowing and speaking and causing difficulty with breathing. Computed axial tomography showed severe oedema of the soft tissue of the tongue. A laryngotomy tube was inserted through the cricothyroid membrane and intravenous penicillin and metronidazole were started. Forty eight hours later mixed viridans streptococci were isolated from blood cultures and intravenous amikacin was added to his treatment. One of the organisms isolated was a nutritional variant exhibiting satellite growth around another streptococcus that was subsequently identified as *Streptococcus sanguis*. The size of the tongue decreased rapidly, and the laryngotomy tube was removed after a further 24 hours.

Case 2—A 47 year old woman was receiving treatment for aplastic anaemia induced by gold (haemoglobin concentration 67 g/l, white cell count $0.5 \times 10^9/l$, platelet count $46 \times 10^9/l$ with 20% neutrophils). Two days after admission she became feverish (38.9°C) and developed massive swelling of the soft tissue on the right side of her tongue. Computed axial tomography showed oedema of the soft tissue extending posteroinferiorly into the floor of the mouth. Two hours later her tongue obstructed her airway and a laryngotomy tube was inserted as in case 1. Intravenous benzylpenicillin, amikacin, and metronidazole were started. Forty eight hours later the patient's temperature was normal, her tongue had returned to normal size, and

the laryngotomy tube was removed and the stoma allowed to close. *Klebsiella pneumoniae* sensitive to amikacin had previously been isolated from throat swabs and grown from blood cultures and mouth swabs taken at the onset of the illness.

Comment

Lingual cellulitis precipitated by invasive bacterial infection is extremely rare, and no cases have been reported previously, although lingual swelling due to haemorrhage has been documented.^{1,3} In our profoundly neutropenic patients lingual cellulitis probably resulted from minor local trauma followed by infection with organisms in the mouth. The mixed infection in case 1 enabled the nutritionally variant streptococcus to be recognised early and amikacin added to the antibiotic regimen. Data on penicillin tolerance in cultured nutritionally variant streptococcus⁴ and clinical observations on patients with endocarditis suggest that all patients should receive combination treatment.⁵

We inserted a laryngotomy tube rather than perform a tracheostomy because we thought that the severe lingual swelling would present only a short term obstruction in the patients. The tube was a fast and effective means of securing the airway. Enhanced computed axial tomograms were also of great value in differentiating between soft tissue of the tongue and lingual haematoma secondary to thrombocytopenia. This allowed us to start antimicrobial treatment with some confidence at an early stage rather than use platelet replacement treatment. The absence of lingual swelling by the second day of treatment was further proof that the swelling was due to oedema of soft tissue rather than haemorrhage.

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Correction

Bronchodilator effect of atrial natriuretic peptide in asthma
An authors' error occurred in this short report by Dr G Hulks and others (28 October, pp 1081-2). The units for plasma atrial natriuretic peptide concentrations should have read pmol/l, not nmol/l as published.

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