had been processed within 30 minutes after resection. Similar proportions of benign and malignant tissue grew facultative bacterial species. There were delays of 16 and 20 hours in processing two malignant samples; neither of these grew anaerobes. The anaerobes isolated included anaerobic cocci (four samples), *Bacteroides distasonis* (one), and *Clostridium perfringens* (one). Anaerobes were isolated from only one specimen before broth enrichment.

Appreciable preoperative bacteriuria ($>10^5$ colony forming units/ml) had been present in four of the nine patients with malignant disease and five of the 24 with benign disease. Three and seven patients, respectively, had had catheters inserted preoperatively. Similar proportions in each group had received antibiotics preoperatively.

Comment

Malignancy may predispose patients to urinary tract infection and bacteraemia with anaerobes.⁵ Our study shows that prostatic malignancies may become colonised with anaerobes, although successful isolation of anaerobes from prostatic tissue requires prompt processing and enrichment in broth culture. Sources of the anaerobes include the periurethra after urinary reflux and the rectum after bacteraemia. Factors that may contribute to the colonisation of malignant tissue by anaerobes include reduced oxygen tension, reduced zinc content of prostatic secretions, and changes in cell surface receptors and mucins. The relative importance of these factors requires investigation.

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Does infection with HIV affect the outcome of pregnancy?

Although the number of pregnant women known to be infected with human immunodeficiency virus (HIV) in the United Kingdom is small, this group has attracted considerable interest, particularly in the risk of infection and illness in the infant and the effect of pregnancy on the mother^{1,2}; there is little information about any possible effect on the pregnancy itself. One study from New York identified children who had already developed the acquired immune deficiency syndrome (AIDS) and reported details of the pregnancies that led to their birth.³ To our knowledge, however, the outcome of pregnancy in women identified as positive for antibodies to HIV has not been reported. Edinburgh has a sizable population of intravenous drug users, who have a high prevalence of HIV seropositivity.⁴ We present details of the outcome of pregnancy in all women identified as positive for antibodies to HIV and in women who had a history of drug abuse or a partner known to be seropositive but who were themselves negative for HIV antibody.

Patients, methods, and results

We identified pregnant women tested for antibody to HIV up to June 1987. Our main sources were the two virus laboratories that carry out all HIV testing in the Edinburgh area. Antibody to HIV was detected by commercial assays performed according to the manufacturers' instructions, and positive results were confirmed by a different assay. Two difficult samples (4% of those yielding positive results) were examined by immunoblotting.
HIV state was known for 205 pregnant women. In most cases it was determined during pregnancy, but in 23 (nine seropositive patients) it was determined retrospectively. Seropositivity was found only in women who had been intravenous drug users or whose partner was known to be seropositive. We studied 50

Outcome of pregnancy by result of test for antibody to HIV

	Positive for HIV	Negative for HIV	Total
Total No of pregnancies	61	75	136
No of spontaneous abortions	11*	4	15
No of induced abortions	16	12	28
No of continuing pregnancies	4	5	9
No of pregnancies resulting in live births (No of babies)	30 (31)	54	84 (85)
No (%) of babies born at <37 weeks' gestation	5/31 (16)	8/54 (15)	13/85 (15)
No (%) of babies born weighing <5th centile ⁵	4/29† (14)	7/54 (13)	11/83† (13)
No (%) of babies weighing <2500 g	7/31 (23)	12/54 (22)	19/85 (22)
No with prematurity resulting in neonatal death or severe handicap	1	1	2

*t=2.43, p<0.02. All other differences between seropositive and seronegative groups not significant.
†No centile charts available for twins.

women who were seropositive (46 intravenous drug users, four with a seropositive partner) and 64 who were seronegative (45 had used intravenous drugs since 1983, 19 had a seropositive partner). These women tended to be young and unmarried and to smoke heavily. They tended to live in areas of the city with multiple deprivation, and both they and their partners tended to be unemployed.
The table shows an apparent increase in spontaneous abortion in the seropositive group, but this may be due to differences in ascertainment as the incidence in the seronegative group was low. Premature delivery, intrauterine growth retardation, and low birth weight were common compared with rates in the total population in Edinburgh (the incidence of preterm labour was 6.6% and of low birth weight 6.3% in Edinburgh in 1984). Seropositive and seronegative women did not differ from each other in these variables.

Comment

The study population was characterised by features of lifestyle and deprivation that would be expected to have an adverse effect on pregnancy. Compared with rates in the total population of Edinburgh, the rates of prematurity and intrauterine growth retardation were increased more than twofold and the rate of low birthweight babies was increased nearly fourfold, though the one twin pregnancy contributed to this. Of the singleton babies, one died neonatally, one died within three months, and one survived but was handicapped. Adverse outcome was equally distributed between the seropositive and seronegative women, and there was no suggestion that infection with HIV itself had any effect. Major medical or obstetric disease was uncommon, and the rate of obstetric intervention was low.
There is no evidence from this small study that infection with HIV per se affects the outcome of pregnancy. All these women, however, were well, and this information may not apply to pregnant women who have symptomatic illness.

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