Delays before discharge notes and typed summaries were received by the two practices

	Weybridge practice (combined discharge note and prescription for drugs to be taken home)	Dover practice (separate discharge note)
No of patients admitted to hospital	57	62
No of deaths in hospital	7	2
No of patients discharged	50	60
No (%) of discharge notes received	36 (72)	44 (73)
Delay in receiving discharge notes (days after discharge):		
Mean	3·0	4·5
Range	1-8	1-13
Median	2·1	3·1
No (%) of typed summaries received	36 (72)	36 (60)
Delay in receiving typed summaries (days after discharge):		
Mean	31·0	29·5
Range	4-92	8-75
Median	17	18·5
No (%) of patients seen by general practitioner before any information was received	7 (14)	14 (23)

posted in both systems and not given to the patient to deliver by hand.

All letters received from the hospitals were stamped with the date and kept. The time taken for both discharge notes and typed summaries to reach the practices was measured in days after the patient's discharge. Three months after discharge we assumed that no further information was going to be received. A record was also kept of whether the patient was seen by one of the general practitioners before any information had been received from the hospital.

The table shows the results. The discharge notes reached the Weybridge practice significantly more quickly than the Dover practice ($p=0·03$, Mann-Whitney U test), the median delay being 1·0 day shorter with the combined system. No significant difference was seen in the delay for the typed summaries ($p=0·8$, Mann-Whitney U test). A higher percentage of patients in the Dover practice were seen before any information was received, though the difference was not significant ($p=0·2$).

Comment

Our results suggest that a discharge note that doubles as a prescription for drugs to be taken home will reach the general practitioner more quickly on average. For those patients discharged without a prescription a discharge note may not have been written in this combined system, but in both systems a discharge note was not received for over a quarter of the patients. Penney found that when patients were asked to deliver their discharge notes by hand to their general practitioner the notes took an average of 4·3 days to reach the practice and did not arrive at all in 17% of cases.[4]

In our study differences between the two hospitals such as throughput of patients, the rate at which the junior medical and clerical staff worked, and postal arrangements were not controlled for, though despite this the time taken for the typed summaries to arrive was similar in the two systems.

Hospitals that use a separate discharge note should consider changing over to the combined discharge note and prescription form. A study could then compare the efficiency of the two types of discharge note within the same hospital, controlling for some of the confounding variables.

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(Accepted 24 October 1988)

Timolol: a non-sedative anxiolytic premedicant for day cases

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Br Med J 1989;**298**:363-4

Nowadays many patients undergo minor operations on a day case basis. Pharmacological relief of anxiety then presents a dilemma as rapid return of psychomotor function is required. Though short acting sedatives have been advocated,[1,2] some patients experience prolonged effects,[3] and use of such agents is not universal. A non-sedative anxiolytic would eliminate this dilemma. Small doses of β blockers are non-sedative and effective in reducing situational anxiety.[4] After receiving ethical approval we studied the effect of oral timolol (10 mg) as a premedicant in a double blind, placebo controlled trial.

Patients, methods, and results

We studied 100 patients (40 undergoing gynaecological procedures, and 60 undergoing dental extraction who received a standardised anaesthetic to compare return of psychomotor function). Informed consent was obtained, and the patients were told that a placebo might be administered. The quality of the patient's previous anaesthetic experience (none, unpleasant, or pleasant) was noted. Before administration of the tablet baseline blood pressure and pulse rate were recorded and variables of alertness (critical flicker fusion threshold)[5] and anxiety measured. Anxiety was assessed with a 100 mm visual analogue scale and the modified multiple affect adjective checklist.[1]

Anxiety was reassessed immediately before induction of anaesthesia (a mean of 72 minutes after administration of the tablet), and blood pressure and pulse rate were recorded then and during the operation. No arrhythmias were seen in either the timolol or placebo group during the study.

Postoperatively critical flicker fusion thresholds were estimated at 15, 30, 60, and 120 minutes after the time of entry to the recovery ward. No significant difference was seen between the groups initially or postoperatively, and psychomotor recovery was judged complete at 120 minutes as critical flicker fusion thresholds were no different from baseline values at this time.

An earlier study (unpublished observation) had

Anxiety scores before and after nervous patients with no previous or unpleasant previous experience with anaesthesia took tablet of placebo or timolol. Figures are means and 95% confidence intervals

	Visual analogue scale			Multiple affect adjective checklist		
	Before	After	Change	Before	After	Change
Placebo (n=25)	51·0 (42·1 to 59·9)	50·4 (38·4 to 62·4)	0·6 (−7·8 to 9·0)	10·9 (9·0 to 11·8)	11·2 (9·0 to 13·4)	−0·3 (−2·0 to 1·4)
Timolol (n=25)	44·3 (35·6 to 52·0)	35·6 (29·0 to 42·2)	8·7 (1·1 to 16·3)	9·4 (7·8 to 11·0)	7·4 (4·5 to 10·3)	2·0 (1·2 to 2·8)

shown higher anxiety scores among patients with no previous or unpleasant previous anaesthetic experience compared with those whose previous experience had been pleasant. This was also the case in this study, and the table shows the anxiety shown by these more nervous patients (n=50). These patients had a lower anxiety score after they took timolol 10 mg. This effect was often described as "a surprising absence of the 'butterflies'." Scores changed little after placebo. The change in mean anxiety score was compared for the timolol and placebo groups by the paired two sample t test, and the reduction in the multiple affect adjective checklist score was significant ($t=2{\cdot}05$, 48 df; $p<0{\cdot}05$).

Comment

Although reassurance and the calm atmosphere that exists in our day bed unit were helpful in reducing patients' anxieties, timolol was a useful adjunct in particularly anxious patients. β Blockers could perhaps be used as anxiolytic premedicants in other patients who are not normally premedicated because the associated sedation might have adverse effects.

As anaesthetists and other medical attendants tend to associate anxiolysis with sedation they will have to adjust their clinical impressions accordingly. As β blockers are non-sedative they may be taken by patients at home so that the effect is well established on arrival at the hospital. That the patients remain fully ambulant preoperatively is an advantage as they can then walk to theatre, thus reducing portering requirements. Little demand is made on nurses once the patients have been admitted if they are not sedated preoperatively, and return to normal is rapid. In a study of midazolam and temazepam the critical flicker fusion threshold was still depressed four hours postoperatively.[2]

We thank the surgeons who let us study patients under their care.

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(Accepted 11 November 1988)

Prevalence of HIV infection among patients with leprosy and tuberculosis in rural Zambia

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Br Med J 1989;**298**:364-5

Mycobacterial infections have been associated with HIV infection.[1] Much evidence exists of tuberculosis as a presenting feature of HIV infection or AIDS related complex. High grade pathogens such as *Mycobacterium tuberculosis* develop early whereas low grade pathogens such as *Mycobacterium avium-intracellulare* emerge only when immune deficiency is more advanced.[2] There are few reports of a direct association between HIV infection and leprosy,[3,4] though clinical leprosy has long been associated with a defect in cell mediated immunity.[5] I studied patients in Zambia to see whether an association between leprosy and HIV infection existed similar to that shown for tuberculosis.

Subjects, methods, and results

The study comprised subjects presenting to Chikankata Salvation Army Hospital from October to December 1987. This is a busy, 240 bed rural hospital in the southern province of Zambia. Patients presenting with leprosy and tuberculosis and blood donors and surgical patients were included. A full history was taken from patients about the onset of symptoms and progression of disease. Personal details such as age, sex, and area of residence were also recorded.

Venous blood samples were allowed to clot and the serum separated by centrifugation. Antibodies to HIV were detected with the Wellcozyme VK51 competitive enzyme linked immunosorbent assay (ELISA). Non-repeatable false positive results are known to occur with competitive ELISAs, so all tests that did not give an obvious negative result were repeated on another sample of blood taken from the patient at least one week later. Thus all positive results were confirmed. In addition, many samples were retested with both the Fujirebio HIV agglutination assay (in which agglutination indicated a positive result) and Elavia (a non-competitive ELISA) kit.

The table shows the number of subjects in each group classified by residence (urban or rural), age group, and sex. No patients from urban areas had leprosy. Of 18 new patients with leprosy, six (33%) were positive for HIV antibody. Of 54 patients with suspected tuberculosis, 27 (50%) were positive for HIV antibody. Eighteen of the 54 had active pulmonary tuberculosis, with results of smears of sputum positive for acid fast bacilli, and eight of these (44%) were also positive for HIV antibody. By comparison, only seven out of 63 blood donors (11%) and two out of 42 surgical patients (5%) were positive for HIV antibody.

The prevalence of HIV infection was significantly higher among patients with leprosy than among blood donors ($p<0{\cdot}05$) or surgical patients ($p<0{\cdot}01$). Some patients came from Lusaka, which may have a higher prevalence of HIV infection than rural Zambia. When the analysis was restricted to rural residents patients with leprosy still had a higher prevalence of HIV infection than surgical patients or blood donors ($p<0{\cdot}001$).

Comment

The present study may have been subject to serious limitations in the selection of cases and controls. In particular, patients with leprosy and tuberculosis who presented to hospital were probably not typical of all patients with these diseases. The patients with leprosy tended to have serious symptoms, such as paralysis or neuritis, rather than a single skin lesion. Thus the results may indicate an increased number of self referrals to hospital among patients with HIV infection. Because of the small number of patients sampling error cannot be discounted. In addition, the controls were not matched to the cases at the time of the study, though some attempt was made to take this into account in the analysis. Nevertheless, the study suggests that as with tuberculosis there may be an association between leprosy and HIV infection, which would have serious implications for programmes to control leprosy.

Further epidemiological studies should be conducted to confirm this association and to monitor