

cedures such as surgery. The hospital has about 250 beds and is equipped with an intensive care unit, operating room and all diagnostic equipment short of magnetic resonance imaging. While in the hospital all the patients are cared for by a resident in family practice who may also admit his own patients from the family health centres. Patients admitted to the hospital are still under the care of their doctor whether general practitioner or specialist and the resident works in cooperation with these doctors.

The residents rotate to other hospitals for training in such subjects as paediatrics and obstetrics and senior residents in such subjects as surgery rotate to the hospital. The residents have formal teaching every day and the residency is run by directors who are engaged in family practice as well as teaching.

Thus, St Margaret Memorial Hospital has a large teaching system on which to base the fellowship. In fact, this is fairly typical of community hospital based residency programmes although most of the fellowships available are university based.

Since I arranged the fellowship much interest has been expressed in the idea which in both the UK and Israel is fairly rare. In view of this interest and the advantages to be gained by a fellowship I would recommend its more widespread acceptance outside the USA.

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Digoxin prescribing in general practice

Sir,

With reference to the study by Cupples and colleagues,¹ I wish to report the results of an audit of digoxin prescribing in a new town health centre in West Lothian with 9200 patients. The analysis of 23 patients (seven men and 16 women) on digoxin therapy was started prior to the publication of the larger study,¹ but our methods and analysis were modified slightly to allow direct comparison.

Only four of the 23 patients were under 60 years of age and the duration of therapy ranged from two to 36 years. Ten patients were clinically well, eight were in cardiac failure and five had signs sug-

gesting digoxin toxicity. The serum digoxin level did not correlate well with clinical signs of toxicity in that it was below the therapeutic range (1.0–2.6 nm) in nine patients, of whom three had clinical signs of digoxin toxicity; within the therapeutic range in 11, of whom one had signs of toxicity; and above the therapeutic range in three, of whom only one had signs of toxicity.

Twenty one patients were taking digoxin for adequate reasons, one was started on treatment for sinus tachycardia alone and one had mitral stenosis and was given digoxin prophylactically in case she developed atrial fibrillation. Of the 15 patients with an atrial tachyarrhythmia, only four had ventricular rates below 90 beats min⁻¹. This suggests undertreatment and this view is supported by the finding that six of the 11 patients with atrial tachyarrhythmia and a ventricular rate above 90 beats min⁻¹ had subtherapeutic levels of digoxin.

The audit revealed lack of consistency in the investigation and management of patients who were prescribed digoxin. Fifteen patients had an electrocardiogram recorded prior to digoxin therapy and 16 during treatment. Twelve patients had had a biochemical profile more than a year ago while 10 had had a profile in the last year. Only eight patients had had their serum digoxin level determined.

After the initial assessment a letter was sent to each patient's doctor with suggestions as to how the management of digoxin treatment might be improved. Four months later each patient's therapy was reviewed. Of the three patients with digoxin levels above the therapeutic range, two remained on the same dose without further serum analysis, while the dose in the third patient had been halved, bringing the serum level into the therapeutic range. Two patients had been taken off digoxin; both had been in sinus rhythm at 80 beats min⁻¹ and had had subtherapeutic levels of the drug — one was the patient who had been started on digoxin therapy for sinus tachycardia alone. Five patients had their digoxin dosage increased — in four of these patients the serum level had previously been subtherapeutic. The serum digoxin level has since been rechecked in three patients and only one was within the therapeutic range.

The survey showed that in this health centre digoxin is not commonly prescribed, but that when it is, it is for adequate reasons in the majority of cases. Our findings are otherwise similar to those of the Belfast study.¹ Assessment before and

during treatment is poor, and suggested changes in therapy are not always implemented.

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Reference

1. Cupples ME, Irwin WG, McDevitt DG. An epidemiological study of digoxin prescribing in general practice. *J R Coll Gen Pract* 1986; 36: 454-457.

Nifedipine and prostatism

Sir,

One of my patients, a man aged 72 years with long-standing exertional breathlessness secondary to ischaemic heart disease, controlled purely by bumetanide and potassium (Burinex-K, Leo), was commenced on nifedipine (Adalat, Bayer) 5 mg twice daily as a trial to improve his dyspnoea after walking 150 yards. Within 24 hours he developed urgency, poor stream, nocturia (four times a night), daytime frequency and dribbling, but there was no evidence of actual retention. The nifedipine was discontinued on his own discretion and within 12 hours his urine flow had returned to normal.

A second trial of nifedipine was begun which produced exactly the same symptoms, therefore treatment was discontinued.

This problem has been reported previously¹ but I would like to alert readers unaware of this potential danger when prescribing a calcium antagonist.

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Reference

1. Williams G, Donaldson RM. Nifedipine and nocturia. *Lancet* 1986; 1: 738.

Disabled living centres

Sir,

It is the general practitioner to whom the patient turns in time of need. It was not appreciated until 1971 that approximately 10% of the patients on a general practitioner's list have some sort of disability¹ and only recently has teaching about disability been a significant feature of undergraduate medical and general practice training. It is well documented^{2,3} that general practitioners are not always aware of the problems disabled patients may have in carrying out daily activities and,