



Stated bowel frequency in relation to average actual frequency.

men to tell us their usual number of bowel movements per day and then collected their stool specimens for five consecutive days.¹ The accompanying figure shows that those who stated they usually had one motion or less a day had a tendency to underestimate their frequency, while subjects who said they had two movements a day overestimated their bowel frequency. Based on these data, it would be more desirable to ask subjects how many movements they usually have per week, rather than their usual frequency per day as we have done. As stated by Manning *et al.*, recordings of bowel movements should be done whenever possible instead of interviews, especially in epidemiological studies.

A NOMURA

Kuakini Medical Center,
Honolulu,
Hawaii

¹ Glover, G A, *et al.* *Lancet*, 1977, 2, 110.

Ban on dental anaesthetics

SIR,—Following the announcement in the *BMA News Review* (August 1977, p 248), the council of the Association of Anaesthetists duly recommended to its members, on the advice of the anaesthetic subcommittee of the CCHMS, that they should no longer administer anaesthetics for dental extractions under the terms of the NHS except in cases of special hardship. This recommendation was made at the annual general meeting in late September, as a result of the DHSS's refusal even to discuss the introduction of an attendance fee which would allow the present fee of £2 gross (including travelling, drugs, and all other expenses) to be raised to a rate which would at least cover expenses, and might even compare with that currently charged by an artisan attending one's home to look at, but not treat, a domestic appliance. Within days of this recommendation, and on an independent issue, the British Dental Association was forced to adopt a policy unique in its negotiating history—namely, it has had to recognise the decision of many of its members to withhold certain items of dental treatment under the terms of the NHS.

It is always abhorrent to any responsible medical or dental body to have to advise its members to limit the care available to patients

under the terms of the NHS; but, so far as the dental services in general, and dental anaesthesia in particular, are concerned, the responsibility for this limitation of service must lie fairly and squarely on the shoulders of the Secretary of State and his advisers, and the public should be made aware of the intolerable intransigence exhibited by the DHSS following years of patient negotiation by the professions. It would seem that it is this Government's intention to preside over the systematic destruction of the State dental services as we have known them.

MICHAEL P COPLANS

Association of Anaesthetists of
Great Britain and Ireland,
London WC1

Ulcerative colitis and amyloidosis

SIR,—I found the clinicopathological conference (1 October, p 871) very interesting. I have published a review¹ of the literature on the association of amyloidosis with inflammatory bowel disease. Relevant case reports were scarce, but there was no clear-cut evidence that amyloidosis ever complicated true idiopathic ulcerative colitis. The association with Crohn's disease was more definite. Although this case report appears to be the most convincing example of amyloidosis complicating ulcerative colitis, I would like to make the following observations: (1) Granulomas are seen in about 70% of cases of Crohn's disease of the colon, but their absence certainly does not exclude such a diagnosis. (2) At necropsy there was only evidence of chronic inflammation of the colon, with no sign of acute colitis. Can one really distinguish the two forms of inflammatory bowel disease on this evidence? (3) As stated by Professor Wright, both the perianal suppuration and the long-standing diarrhoea with mucus but no blood are more in favour of Crohn's disease. (4) The possibility this was a "primary" amyloidosis (or indeed secondary to occult myeloma) is surely not excluded, especially as amyloidosis can produce both radiological and clinical features of inflammatory bowel disease. Moreover, one cannot rely on the distribution of amyloid to distinguish primary from secondary amyloidosis.

I only make these points to suggest that there must still be at least some doubt whether amyloidosis is a real complication of ulcerative colitis.

PHILIP SHORVON

Wembley Hospital,
Middx

¹ Shorvon, P J, *American Journal Of Digestive Diseases*, 1977, 22, 209.

Poisoning with tricyclic antidepressants

SIR,—Drs P J Dally and Joan R Gomez (3 September, p 638) have misrepresented me and have themselves made some questionable claims, as well as showing a rather cavalier attitude to controlled drug trials. I did not suggest that all antidepressants are equal; but, given the marginal superiority of tricyclics over placebo in many general practice trials, there is not much to be lost—as Dr G Edwards (8 October, p 954) implicitly agrees—by starting with a relatively safe drug for the minor upsets that constitute the majority of cases, especially as compliance with treatment is generally poor. Many psychiatrists, inci-

dentally, would dispute their suggestion that iproniazid is especially effective in severe depression.

They write that no one would, or should, give tricyclics to patients "whose depression stems from a disordered personality or who are prone to suicidal gestures" without special precautions. That would surely apply to the majority of depressed patients, and it is precisely because so many are given tricyclics for the wrong reasons, in large quantities and without supervision, that the problem exists. Indeed, they evidently accept that this is so because they ask why I do not criticise unnecessary or unthinking prescribing. If they had read the references I provided (and I could have given several more) they would see that I have been doing my best; and I can assure Dr Clive Stubbings (3 September, p 639) that I have not limited my criticism to GPs.

Although after some 10 years flupenthixol is hardly new, I do agree with Dr Edwards that new drugs should be used with great caution, and that is my usual practice and teaching. In this context, however, it is the short-term toxicity that is important, and that is fairly easily established. If we wait for the dawn of selectivity in prescribing habits, as Dr Edwards suggests, I fear we shall wait long and probably in vain, and many people will die as a result. At least everyone now seems to accept that the toxicity of tricyclics is an important and largely avoidable factor in the success of suicide attempts. Unfortunately, there is little evidence that they have prevented any suicides to set against the toll of tricyclic deaths, which has been increasing steadily by over 20% each year since 1969.

COLIN BREWER

London W1

Vaccine against gonorrhoea

SIR,—Your leading article (8 October, p 917) "A vaccine against gonorrhoea?" is particularly timely since Brinton¹ has recently announced a trial of a vaccine prepared from gonococcal pili. The danger you suggest of partial immunity resulting in symptomless infection deserves closer examination. The risk would not be to the vaccinated individuals but to their sexual partners. The particular advantage of the proposed pili vaccine, however, is that antibody to pili should prevent adhesion of gonococci to the mucous membrane and so reduce carriage. Only future observations will tell. Analogies are dangerous, but when diphtheria toxoid was first introduced on a large scale it was feared that many carriers would result. In the event *Corynebacterium diphtheriae* almost disappeared.

It is possible to argue in the opposite sense and suggest that the high frequency of asymptomatic infections already found is due, in part, to a poor immune response and that immunisation could increase the likelihood of symptoms, perhaps via the development of immune complexes or similar mechanisms.

What is certain is that as many as 68% of infected men may be asymptomatic,² while the number of women with symptoms and undetected infection is greater than generally supposed.³

Epidemiological control by selective vaccination of high-risk groups or by diagnosis and treatment requires effective screening. At present screening is done entirely by cultural methods and is hindered by the problems of

sampling. Even where culture is possible its efficiency may be low. Estimates range from 40 to 90%.¹

We have recently applied the enzyme immunosorbent assay (Elisa) technique to the detection of antibodies in gonorrhoea. The test we have developed uses an extract of outer membrane proteins from *Neisseria gonorrhoeae* as antigen and is sufficiently sensitive to allow the patient's serum to be tested routinely at a dilution of 1/1000. Details will be published elsewhere. The important finding from the point of view of screening is that appreciable antibody titres could be detected in 50% of patients within a few days of infection and in a similar proportion of asymptomatic carriers, both male and female. Moreover, antibody levels were not affected by a past history of gonorrhoea unless there had been an attack within the previous 12 weeks. In the control populations used 16% of men and 11% of women had antibody levels above the diagnostic threshold chosen, but the frequency distributions suggest that some of the 'false-positives' may have been real.

In patients with systemic gonococcal infection antibody levels were extremely high and the test could prove useful in the diagnosis of esoteric manifestations.

ALAN A GLYNN
CATHERINE ISON

Bacteriology Department,
Wright-Fleming Institute,
St Mary's Hospital Medical School,
London W2

- ¹ Brinton, C C, *New York Times*, 1977, 30 June, p 15.
² Handsfield, H H, *et al*, *New England Journal of Medicine*, 1974, **290**, 117.
³ McCormack, W M, *et al*, *Lancet*, 1977, **1**, 1182.
⁴ Norrins, L C, *Journal of Infectious Diseases*, 1974, **130**, 677.

Diagnosing familial hypercholesterolaemia in childhood

SIR,—Following the report of Dr J V Leonard and others (18 June, p 1566) on the diagnosis of familial hypercholesterolaemia (FH) in childhood by the use of serum cholesterol estimations, we pointed out (9 July, p 127) some of our experience on the regulation of 3-hydroxy-3-methylglutaryl (HMG) CoA reductase activity in freshly isolated leucocytes of FH patients¹ and its possible application as a screening procedure. Further letters on the subject have been published that refer to our work and we would like to reply to points raised.

Dr J V Leonard and his colleagues (13 August, p 455) state that our data failed to support the hypothesis that the diagnosis of FH can be made by measurement of HMG CoA reductase activity in the system we used. Presumably they are not criticising our biochemical method; if they are they do not state any of their criteria. So far as we understand, their objections centre on the discordance between HMG CoA enzyme regulation and serum cholesterol estimations in members of the family studied. Central to their argument is subject II₄, sister of the index patient, who had a serum cholesterol of 8.58 mmol/l (331 mg/100 ml) but showed normal regulation of reductase activity. According to Leonard *et al*, this subject has a "high probability of being affected." As pointed out in the study, however, the member of the kindred was clinically well (and still is). We would be very surprised if a person (now aged 50) who has

no arcus senilis, xanthomata, or evidence of premature vascular disease and whose serum cholesterol has returned to normal on simple dietary advice is carrying the gene for FH.

With regard to the letter of Dr Postle and his colleagues (8 October, p 957), we do not think that their preliminary data on five patients with FH studied by a method that has been in use in our laboratory (and many others) for some years "may overcome some of the problems raised . . ." in our work. We have considerable experience in both the regulation of sterol synthesis and HMG CoA reductase activity in approximately a hundred subjects,¹ and if Postle *et al* have anything new to say on the subject of the biochemical basis or the diagnosis of FH that will throw light on "problems" with our work then they should state it clearly.

D J GALTON
D J BETTERIDGE

St Bartholomew's Hospital,
London EC1

- ¹ Betteridge, D J, Higgins, M J P, and Galton, D J, *British Medical Journal*, 1975, **4**, 500.
² Higgins, M J P, Galton, D J, and Betteridge, D J, *Clinical Science and Molecular Medicine*, 1975, **49**, 24.
³ Higgins, M J P, Lecamwasam, D S, and Galton, D J, *Lancet*, 1975, **ii**, 737.
⁴ Betteridge, D J, Higgins, M J P, and Galton, D J, *Proceedings of the Royal Society of Medicine*, 1976, **69**, Suppl. 2, 104.
⁵ Higgins, M J P, and Galton, D J, *European Journal of Clinical Investigation*, 1977, **7**, 301.
⁶ Higgins, M J P, Galton, D J, and Betteridge, D J, *Colloquium XXV on Protides in Biological Fluids*, 1977 (in press).

Net beds in general practice

SIR,—There have been recent references to the use of net suspension beds in neuro-surgical centres and dermatology units.¹ Your readers might be interested to hear of the use of this device, in which the patient is suspended on a loose woven nylon net hung above a bed on two rollers, in general practice. A 76-year-old man had to have both his legs amputated above the knee for arteriosclerotic gangrene. At his own request he was sent out of hospital to an extended family of agricultural field workers. His stumps were well healed, but he had deep pressure sores over each greater trochanter of the femurs, over each ischial tuberosity, and a huge confluent sacral sore.

The family saw a net suspension bed being demonstrated on television and, as they were willing to provide the necessary hiring fee, I felt I had little to lose. The device arrived with a demonstrator and was fixed to a standard hospital bed obtained through the nursing service.

To my surprise the family rapidly adapted themselves to its handling, and at the time of his death four months later in uraemic coma all his bed sores were healed except for the sacral sore, which was reduced to under half its original size. He was a heavy ill man with painful bed sores, quite helpless, with poor circulation, and no legs, whom I would normally have expected to deteriorate further. As it was he had a reasonable quality of life for his last few months.

The lessons we learnt were that although the net suspension bed made for great ease of handling and turning, and appeared to be comfortable, and certainly spread the load on his pressure areas, it is no substitute for good general nursing care. This my district nurse and her colleagues provided in abundance. This also meant giving instruction in the handling of the bed to whichever member

of the family whose turn it was to look after "grandad." Continuous vigilance was necessary and we nearly had another pressure sore on one shoulder when he was kept on his side for a little too long. The equipment was hired for a period of three months and after that period there is the option to purchase at a reduced rate. It has a definite place in the handling of bed-ridden cases, but I must insist that it is ancillary to, and no substitute for, good general nursing care.

DAVID SCOTT

Bardney,
Lincs

- ¹ Gibbs, J R, *Lancet*, 1977, **1**, 174.
² Dahl, M G C, *Lancet*, 1977, **1**, 311.

Widespread atheromatous arterial disease

SIR,—While agreeing with all that Dr A Smith and Professor M D Rawlins says (6 August, p 378) about the use of beta-blockers in hypertension and coronary artery disease, I am surprised that the latter advocates their use in a patient with intermittent claudication and a smattering of absent lower limb pulses: surely beta-blockade aggravates peripheral vascular disease of this nature.

J G MALCOMSON

Howick,
Auckland,
New Zealand

* * * We sent a copy of Dr Malcomson's letter to Dr Smith and Professor Rawlins, who reply as follows—ED, *BMJ*.

SIR,—Patients receiving beta-blockers may develop symptoms of Raynaud's phenomenon involving both hands and feet, and there are reports of progression to frank gangrene of the extremities.¹ However, while hand blood flow is largely controlled neurogenically, the dominant stimulus to increased muscle flow during ischaemia and exercise is locally mediated. Consequently, there is a sound basis for suggesting that beta-blockade might have a deleterious effect on skin blood flow in patients with intermittent claudication and careful supervision is essential. We cannot accept, however, that the use of beta-blockers is contraindicated.

A SMITH

Department of Family and
Community Medicine,
University of Newcastle upon Tyne

M D RAWLINS

Department of Pharmacological
Sciences (Clinical Pharmacology)
University of Newcastle upon Tyne

- ¹ Zacharias, F J, *Postgraduate Medical Journal*, 1971, **47**, Suppl. p 75.
² Marshall, A J, *et al*, *British Medical Journal*, 1976, **1**, 1498.

Dystonic reaction to high dose propranolol

SIR,—A 35-year-old married woman in this hospital has suffered from a schizoaffective disorder from the age of 16 which failed to show a convincing response to the various approaches now available for the treatment of this condition. Her illness and admissions to hospital were at first intermittent, but she has now been an inpatient here continuously for the past 10 years.