

gories of mortality quoted are well in excess of that produced by the form of bias suggested. Also, as control subjects experience some level of environmental tobacco smoke<sup>2</sup> our estimates of risk could be conservative.

Mr Lee misunderstands our use of urinary cotinine concentrations in passive smokers. We were using published data to establish whether our study had sufficient statistical power to detect the size of risk that might be expected among passive smokers. If Mr Lee is correct and urinary cotinine concentrations are equivalent to a lower dose than assumed then our decision not to rely solely on statistical significance as evidence of a genuine effect was definitely correct. Ours was a cohort study of a general population and was not subject to the biases associated with a case-control design. In addition, subjects reported their own smoking histories, and environmental exposure was based on record linkage of cohabitants, thereby avoiding the need to rely on self reporting of passive exposure.

Our observations on lung cancer may be based on only nine deaths but are consistent with the result of a meta-analysis<sup>3</sup> combining 13 separate studies, which concluded that breathing other people's tobacco smoke causes lung cancer. The importance of our study lies in the estimates of risk for ischaemic heart disease (based on 84 deaths), all causes of death related to smoking (175 deaths), mortality from all causes (263 deaths), respiratory symptoms (292 cases), and cardiovascular symptoms (117 cases). The consistent increase in risks for such a wide variety of health outcomes from an unbiased prospective cohort study together with a dose-response relation in passive smokers strongly suggests that there is now a case to be answered against passive smoking that extends beyond the causation of lung cancer.

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## Referrals from general practice to hospital outpatient departments

SIR,—One aspect highlighted in the report by Drs John Emmanuel and Nigel Walker<sup>1</sup> is treatment of skin disorders in general practice. Proposals in the white paper are likely to encourage more minor surgery to be undertaken by general practitioners. This may be more cost effective (although our own experience indicates that this may not necessarily be so), but skin surgery should be undertaken in general practice only if the diagnosis is certain—otherwise referrals may be increased rather than decreased as intended. We report two problems that resulted from inappropriate skin surgery in general practice.

A 49 year old woman had a pigmented lesion removed by curettage and cautery from her lower leg by her general practitioner. Histology showed malignant melanoma, but it was impossible to ascertain the depth of the tumour on the basis of the inadequately thin curettage specimen. The patient then had a wide excision and graft, but it is

possible that she would not have required an extensive operation because narrow excision margins can sometimes be adequate for very thin melanomas.

In another patient, a 46 year old woman, a slightly raised nodule on the leg was treated by curettage and cautery by her general practitioner. Histology showed invasive squamous cell carcinoma and the patient was referred for further advice. Because it was difficult to know the adequacy of the initial treatment the patient was committed to prolonged follow up to exclude recurrence of the lesion.

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## Provision of services

SIR,—It seems to be the custom that when a specialist advisory committee pronounces on how services should be provided this is accepted, but there are occasions when someone needs to stand up and say "You are wrong."

The North West Thames ear, nose, and throat regional advisory subcommittee says that inpatient ear, nose, and throat services should be provided only in subregional specialist centres and not in the smaller district general hospitals. I have been the anaesthetist for three to four ear, nose, and throat lists per week for over 20 years and know that most of these operations are everyday bread and butter surgery and that over half are on children. Indeed the commonest paediatric operations are ear, nose, and throat—tonsils, glue ears, etc. These services have always been available at the local hospital and to say they should all go to subregional centres is tantamount to saying all hernias and ingrowing toenails should go to specialised units. Not only does this deprive patients of what I would call a core service but it has profound knock on effects on most other services in the district general hospital through the possible loss of recognition of anaesthetic jobs. Before someone brings out the old chestnut of "Make rotations" I will answer "Just you try to."

We are facing this situation in North West Hertfordshire District, where the loss of inpatient ear, nose, and throat services will disadvantage our patients and could cause havoc with the hospital services as a whole. I am afraid that this may be only the beginning of specialist groups building their own little empires without regard to the patients and hospitals from whom they withdraw their services.

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## Psychiatric illness among the homeless

SIR,—Dr Max Marshall describes a high proportion of residents of Oxford hostels for the homeless as being "long term psychiatric patients" and implies that they are deinstitutionalised long stay patients.<sup>1</sup> Our findings, however, suggest that hostel residents with psychiatric disabilities may have had numerous yet relatively brief hospital admissions and include those sometimes referred to as "revolving door" patients.

We are currently evaluating a psychiatric liaison

service to residents of a direct access hostel for homeless women in central London. Of 33 women seen to date, 26 are known to have had at least one previous psychiatric admission, but only four have spent periods of more than one year continuously as inpatients. We believe the current emphasis on deinstitutionalised long stay patients is misplaced: it is the needs of those with chronic, severe psychiatric disabilities in the community and the revolving door patients that are not being addressed. Deferring the closure of psychiatric hospitals<sup>2</sup> will have little impact on this large group of people. The Department of Health has stated that the forthcoming white paper on community care will contain plans to prevent the unplanned discharge of long stay patients into the community. These safeguards will be of no value to most severely disabled psychiatric patients in the community.

Dr Marshall's findings and our own data both show high levels of unmet need and are in keeping with most surveys of people with psychiatric disorders in the community. These findings clearly indicate inadequate provision of care, but they should not be used as evidence of the ineffectiveness of deinstitutionalisation programmes or properly planned and funded community services. The few controlled studies of selected patients discharged within carefully planned community programmes<sup>3</sup> show that long term psychiatric patients (whether or not they have had long stay psychiatric admissions) can be maintained outside hospital without the deterioration in symptoms, poor psychosocial functioning, and readmissions that are all too commonly found in the surveys. Perhaps more importantly, the controlled studies in which patients' wishes and satisfaction have been recorded clearly show that they prefer to be treated in the community.

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## Safety of Picolax in inflammatory bowel disease

SIR,—In view of the suggestion of Dr A J G McDonagh and colleagues that further evaluation of Picolax is merited<sup>1</sup> we would like to report our own experience with this preparation in a large cohort of children undergoing fiberoptic colonoscopy at St Bartholomew's Hospital. Between 1982 and 1988 we performed 534 colonoscopies on 412 children attending this hospital and, with few exceptions, Picolax was used routinely to prepare the colon before endoscopy. This included the 287 procedures performed on children with chronic inflammatory bowel disease (163 with Crohn's disease, 101 with ulcerative colitis, 23 with indeterminate colitis) that was either known to pre-exist or suspected and confirmed at the time of endoscopy. We found the preparation to be successful for cleansing the bowel and free of major complications.

Based on our experience we have developed the following regimen for preparing the colon before endoscopy in children. The child is given only fluids for 24 hours before the procedure and is given two doses of Picolax, one about 15 hours before endoscopy and the other three hours before. The dose is age dependent: children over 6 years

are given a whole sachet (dissolved in warm water), those between 4 and 6 years half a sachet, and those between 1 and 4 years a quarter of a sachet. We do not use Picolax in infants aged less than 1 year, in whom successful bowel preparation is usually possible with a fluids only diet for 24 hours. In addition to Picolax, one dose of senna syrup (X-Prep, Napp) 1 ml/kg is given 18 hours before endoscopy. All children are encouraged to drink copiously to avoid dehydration.

With this regimen total examination of the colon to the ileocaecal valve was possible in 91% of the 534 procedures. Only 0.7% were abandoned because of failed bowel preparation; cleansing was considered to have been unsatisfactory in a further 4.1% of cases (mainly owing to poor compliance), although it was sufficient to allow an adequate examination to take place. No children suffered unacceptable complications related to bowel preparation—this included the 287 children with chronic inflammatory bowel disease proved by biopsy, most of whom received the full regimen of Picolax and senna syrup. A few children with severe diarrhoea at the time of endoscopy were given a more limited preparation consisting of fluids only for 24 hours beforehand and a rectal washout 30 minutes before the procedure. No children have been identified in whom the bowel preparation described has resulted in a relapse of their inflammatory bowel disease.

We conclude that Picolax is a safe, effective bowel cleansing agent in children undergoing fiberoptic colonoscopy, including those with chronic inflammatory bowel disease. Care is required, however, to ensure that the child remains well hydrated, and it should be emphasised that the regimen described above is contraindicated in patients with suspected toxic dilatation of the colon in whom a limited endoscopy is being considered for histological diagnosis.

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1 McDonagh AJG, Singh P, Pilbrow WJ, Youngs GR. Safety of Picolax (sodium picosulphate-magnesium citrate) in inflammatory bowel disease. *Br Med J* 1989;299:776-7. (23 September.)

## Symptoms of oestrogen deficiency in women with oestradiol implants

SIR,—In reply to the report by Mr K Gangar and colleagues of the return of symptoms of oestrogen deficiency despite supraphysiological serum oestradiol concentrations in postmenopausal women given oestradiol implants,<sup>1</sup> Dr G I M Swyer and Drs J H Tobias and T J Chambers suggest that such sustained levels of oestradiol may be harmful.<sup>2,3</sup> We describe a case that supports this and also highlights a potential and often overlooked problem.

A 51 year old woman had had a bilateral salpingo-oophorectomy at the time of hysterectomy for severe endometriosis 28 years before. She immediately developed severe menopausal symptoms, which were treated initially with oral oestrogen and later with oestradiol implants. Over eight years the duration of symptomatic relief with the implants progressively shortened, and she requested repeat insertions with increasing frequency until eventually she was receiving a new implant every four weeks. At this time her symptoms changed to include pronounced swelling of the fingers, severe migraine headaches, and abdominal bloating. These were thought to be the result of oestrogen excess, and the implants were discontinued. The new symptoms subsided,

but menopausal flushes returned. Her peak oestrogen concentration was not determined, but 12 months after the last insertion her serum oestradiol concentration was 1211 pmol/l. She was referred to our clinic with the diagnosis of a suspected tumour producing oestrogen. When she was seen 18 months after receiving the implant her serum oestradiol concentration had fallen to 673 pmol/l, but it fell to only 169 pmol/l at 30 months.

This woman seemed to develop symptoms of oestrogen excess during a time of frequent insertion of oestradiol implants. Fortunately the symptoms were not severe and quickly diminished, but the menopausal flushes returned after a few months, though her oestrogen levels remained above the physiological range for more than 18 months. This is much longer than the normally recognised functional life of oestradiol implants and has important implications for women stopping this type of treatment who still have their uterus. Work by Paterson and colleagues on endometrial histology related to treatment with unopposed oestrogens showed that 24 of 43 women treated with oestradiol implants developed endometrial hyperplasia if cyclical progestogen treatment was discontinued for two months or more.<sup>4</sup>

Sustained supraphysiological concentrations of oestradiol would be expected to lead to an even higher incidence with a corresponding increase in the risk of endometrial carcinoma. This important aspect of management is easily forgotten when treatment is stopped. Indeed, it was not referred to by Mr Gangar and colleagues nor by Barlow *et al* in their reports of treatment with long term hormone implants.<sup>5</sup> We advise most strongly that women with an intact uterus who stop treatment with oestradiol implants should continue to receive cyclical progestogen as prophylaxis against potentially serious endometrial disease. The return of their climacteric symptoms is not a reliable guide to oestrogen state, and progestogen should therefore be given until serum concentrations of oestradiol fall into the postmenopausal range or, if such monitoring is impractical, for at least 18 months and preferably for two years.

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## Body mass index and diastolic blood pressure

SIR,—We would like to add our experience on the relation between body weight and blood pressure to that of Dr Stig Sonne-Holm and colleagues,<sup>1</sup> using data from our previous study.<sup>2</sup> We recently reviewed the relation between sitting diastolic blood pressure and body mass index in 4152 patients with essential hypertension. Mean diastolic blood pressure was 104.2 (SD 5.8) mm Hg and mean body mass index was 27.1 (4.9) kg/m<sup>2</sup>; they had a weak positive correlation ( $r=0.076$ ,  $p=0.0001$ ). An increase in body mass index of 1 kg/m<sup>2</sup> was associated with a rise in diastolic blood pressure of approximately 0.09

mm Hg. The population in the study by Dr Sonne-Holm and colleagues was more obese, having a body mass index of  $\geq 31$  kg/m<sup>2</sup>. We did not discriminate between obese and non-obese patients, and the relation between body mass index and diastolic blood pressure was, at best, weak in our study.

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## Treatment of benign prostatic hyperplasia

SIR,—Professor G D Chisholm describes a discouraging situation in his reply<sup>1</sup> to Dr Klim McPherson's call for a prospective comparative trial to test a suggestion from observational evidence that there is an excess risk of serious complications after transurethral resection compared with open surgery for benign prostatic hyperplasia.<sup>2</sup> Professor Chisholm implies that transurethral resection is so popular (the procedure was performed about 16 times more frequently than open surgery in Scotland in 1987) that it will be extremely difficult to obtain approval for the conduct of a randomised trial. "Meanwhile," he notes, "the important advantages of a transurethral resection compared with open surgery remain true."<sup>3</sup>

The disturbing impasse reminds me of John Stuart Mill's comments on the toleration of dissent: "There is the greatest difference between presuming an opinion to be true, because with every opportunity for contesting it, it has not been refuted, and assuming its truth for the purpose of not permitting its refutation."<sup>4</sup>

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## Immunisation: causes of failure and strategies for success

SIR,—Dr A Nicoll and colleagues conclude that the 90% target for childhood immunisation can be achieved only by enthusiastic professionals committed to immunisation with adequate back up.<sup>1</sup>

In March this year I conducted a survey to look at the uptake of pertussis immunisation in 201 children in a practice population who had attained the age of 2 years in the previous 12 months. If the rate fell below the 90% target proposed in the new general practitioner contract<sup>2</sup> I sought to determine whether it was possible to achieve this and what effort would be necessary to do so.

Of the 201 children, 169 had completed immunisation. I sent the parents of the remaining 32 children questionnaires about pertussis immunisation, 16 of which were returned within three weeks. The rest (16 families) were visited at home by me or a health visitor. Four families needed more than one visit, and two were never contacted despite four visits to both family homes. Of the 30 children whose parents were contacted, two had completed immunisation recently but the informa-