help in the selection of patients for adjuvant therapy. The choice of index will depend on the surgical staging procedure adopted by a particular

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- 1 Blamey RW, Elston CW, Ellis IO, Morgan DAL, Maybittle JL Node negative breast cancer. Br Med \mathcal{J} 1990;300:1137.
- 2 Delides GS, Garas G, Georgouli G, et al. Interlaboratory variations in the grading of breast cancer. Arch Pathol Lab Med 1982;106:126-8.
- 3 O'Reilly SM, Richards MA. Node negative breast cancer. Br Med J 1989;300:346-8. (10 February.)
- 4 Leslie MD, Maher EJ. Node negative breast cancer. Br Med J 1990;300:749. (17 March.)
- 5 Early Breast Cancer Trialists' Group. Effect of adjuvant tamoxifen and of cytotoxic therapy on mortality in early breast cancer. N Engl 7 Med 1988;319:1681-92.
- 6 O'Reilly SM, Camplejohn RS, Barnes DM, Millis RR, Rubens RD, Richards MA. Node negative breast cancer: prognostic subgroups defined by tumour size and flow cytometry. 7 Clin Oncol (in press).

Pelvic inflammatory disease

SIR.—In his recent editorial Mr I Malcolm Pearce highlights the often inadequate diagnosis and treatment of women with pelvic inflammatory disease.1 My own study, which was based on a questionnaire sent to individual practitioners requesting details of their management of pelvic inflammatory disease, illustrates the extent of the problem in general practice.2

Of 112 general practitioners returning their questionnaires, 94 (84%) provided a combination of antibiotics, 28 (25%) provided antichlamydial treatment, and only four provided combination treatment against Chlamydia trachomatis and Neisseria gonorrhoeae. In total 44 doctors (40%) considered investigating or referring male consorts. Only two doctors remarked that they routinely refer for diagnosis all patients with a first attack of pelvic inflammatory disease.

Although optimum management may require admission and diagnostic laparoscopy, this may be impracticable. It might be helpful, therefore, for gynaecologists to develop with genitourinary physicians and general practitioners clear guidelines on treatment and referral to hospital. The evidence so far suggests that the management of pelvic inflammatory disease could be improved greatly.

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- 1 Pearce JM. Pelvic inflammatory disease. Br Med J 1990;300: 1090-1. (28 April.)
- 2 Eynon-Lewis AJ. Audit of the management of pelvic inflammatory disease in general practice. J R Coll Gen Pract

SIR, - The editorial by Mr J M Pearce is welcomed by most of us who practise genitourinary medicine, and we hope that it will improve referrals to our specialty. But Mr Pearce fails to emphasise the cost effectiveness of efficient treatment-in terms of misery in patients, morbidity, and precious NHS funds. The pennies spent on antibiotics cannot be compared with the thousands of pounds spent on infertility treatment.

We would also like to point out that Mr Pearce's advice on treatment for Neisseria gonorrhoea is inappropriate in these days of penicillinase producers and plasmid resistance. Ciprofloxacin or cefuroxime would be more appropriate. Antichlamydial treatment should start concurrently, not as a "two week follow up course," although two weeks' total treatment is essential. Doxycycline, however, would cover both organisms.

Ideally, if pelvic inflammatory disease is suspected it may be prudent to admit the patient to hospital through the department of genitourinary medicine for immediate and approriate antimicrobial tests and contact tracing. Tactful explanation to the patient about this detour is usually well accepted. If such a detour is not possible endocervical swabs for chlamydia and gonorrhoea must be taken and placed in the correct transport media before starting antibiotics, and the patient must be referred as soon as possible. One week and three weeks after admission the patient should return to the department for "tests of cure" and for further counselling. Contact tracing and subsequent treatment of patients' consorts may avert a second attack.

Liaison between gynaecologists and genitourinary physicians greatly enhances the patient's management and greatly reduces morbidity and cost. Why should patients suffer lifelong for a night's pleasure because doctors are reluctant to recognise coitus as the cause of pelvic inflammatory disease?

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1 Pearce JM. Pelvic inflammatory disease. Br Med J 1990;300: 1090-1. (28 April.)

SIR,-Mr J M Pearce says in his editorial that swabs from the rectum and oropharynx rarely, if ever, add useful evidence to vaginal and urethral swabs.1 I agree that cervical and urethral swabs give a high yield of positive results but suggest that rectal swabs should be taken because the rectal mucosa is infected in 35-50% of women with gonococcal cervicitis.2

Most rectal infections occur without acknowledged rectal sexual contact. Because the prevalence of rectal infection in women is positively correlated with the duration of endocervical infection it would seem sensible to screen the rectum for infection when gonococcal pelvic inflammatory disease is suspected. If a sensitive explanation is given acrimony can be averted in most cases. Cervical swabs stained by Gram's method are negative in 40-60% of women with gonococcal salpingitis and examination of rectal swabs by Gram staining may help, therefore, in early identification of the causative organism.

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1 Pearce JM. Pelvic inflammatory disease. Br Med J 1990;300:

- 2 Thin RN, Shaw EJ. Diagnosis of gonorrhoea in women. British Journal of Venereal Diseases 1979;55:10.
- 3 Barlow D, Phillips I. Gonorrhoea in women: Diagnostic, clinical and laboratory aspects. Lancet 1978;i:761.

 4 Kinghorn GR, Rashid S. Prevalence of rectal and pharyngeal
- infection in women with gonorrhoea in Sheffield. British Journal of Venereal Diseases 1979;55:408.

Screening and the 1990 contract

SIR, -Dr D Slater's concern about the increased load on laboratory services generated by the new contract for general practitioners is pertinent'; there has already been a recent increase from three to four weeks in the reporting time for cervical cytology reports in this district. Dr Slater's estimate for the histopathology resources needed to service increased minor surgery in general practice may, however, be overgenerous. A large proportion of minor surgery will entail procedures such as soft tissue injections which do not use laboratory time.

In my practice, which serves a population of 1900 patients, 104 minor surgical procedures were performed in one year, of which 56 were soft tissue injections; of the remaining 48, only 24 led to histopathological analysis.

Extrapolating these data to the 70 general practitioners expressing an interest in performing minor surgery in Rotherham, 1680 specimens for histopathology per year would be generated compared with Dr Slater's figure of 4000. Also, much of the minor surgery would have been carried out previously in hospital, at higher cost. Thus the estimate of extra funding can be reduced further.

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1 Slater D. Screening and the 1990 contract. Br Med J 1990;300: 1074. (21 April.)

Management of constipation

SIR, -Professor R Taylor mentioned in his recent article that fibre supplements may be used to treat constipation in elderly people. Constipation is a common symptom in this age group,² and in sick, immobile old people it is even more common, often accompanied by poor colonic motility and delayed transit times.3 In many geriatric units wheat bran is added routinely to the hospital diet.

We investigated the effects of adding 10 g of wheat bran to the diet of 20 elderly patients (mean age 77) who had been in hospital longer than one month and were bed bound. The study included a placebo phase (two weeks), a treatment phase (four weeks), and a second placebo phase (three weeks). Patients and nurses were told that fibre would be added to the diet to control constipation by natural means. This message was reinforced by written information. Menus were simplified to include soups, stews, and porridge to which finely milled bran could be added easily. During the placebo phases food was thickened but no bran was added.

Bran improved stool weight and consistency and reduced the number of days without stools, but faecal incontinence was a frequent and distressing side effect in 10 of 20 patients on bran compared to three on placebo (p<0.05). Placebo effects on symptoms were prominent in both patients and staff. An earlier study of younger subjects with irritable bowel syndrome also revealed powerful placebo effects.4

Frail elderly people may have lax anal sphincters that cannot retain soft or liquid faeces resulting from a high fibre diet.5 We recommend that treatment with high fibre diets or supplements is avoided in this group of elderly people.

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- 1 Taylor R. Management of constipation: high fibre diets work. Br Med J 1990;300:1063-4. (21 April.)
- 2 Thompson WG, Heaton KW. Functional bowel disorders in apparently healthy people. Gastroenterology 1980:79:283-8.
- 3 Brocklehurst JC, Kirkland JL, Martin J, Ashford J. Constipation in long stay elderly patients: its treatment and prevention by
- lactulose, poloxalkol-dihydroanthroquinolone and phosphate enemas. Gerontology 1983;29:181-4.

 4 Lucey MR, Clark ML, Lowndes JO, Dawson AM. Is bran efficacious in the irritable bowel syndrome? A double blind placebo controlled crossover study. Gut 1987:28:221-5
- 5 Barratt JA. Effect of wheat bran on stool size. Br Med \mathcal{J} 1988:296:1127-8.

Terminal care in general practice

SIR,-Dr A C Blyth's audit of terminal care in a training practice noted that all recently bereaved families were visited for counselling 1-I fear that such visits are not usually offered.

A study of over 300 recently widowed spouses showed that only 33% were visited at home by their general practitioners in the five to seven months after bereavement and 24% were not seen at all.2 General practitioners' views about the need for

bereavement counselling and for related home visits vary greatly; some will visit only if requested, some delegate the task to health visitors or district nurses, and others make the visits themselves as often as they feel is necessary.

I spent one year as a trainee in a general practice with five partners that had no specific policy on bereavement counselling. The practice served 10 700 patients in Weston super Mare, of whom almost a third (twice the national average) were over 65. There were 179 deaths in the practice in 1988, of which 79 occurred in nursing or residential homes. Of the other 100 patients who died, only 31 were survived by a spouse who was registered at the same address with our practice.

Review of the case notes of the 31 patients six to 12 months after their spouses died showed that in only nine was any record made of the bereavement and that none of the notes of the 21 widows had been reclassified by ticking the "widow box" (a box denoting marital status on all women's records of the Lloyd George type).

Of 10 patients whom I interviewed, one had been visited for bereavement counselling by the general practitioner and considered the support most helpful. Eight believed that the general practitioner should have visited, preferably in the month after the funeral. Friends, neighbours, and relatives provided greatest support for eight of the patients interviewed, and one said that the vicar had been most helpful.

Pathological grief reactions may be prevented by support from medical and psychiatric services. Well documented and sensitive management of bereaved people is often neglected and its absence may lead to considerable avoidable morbidity. In places such as Weston super Mare, where there is an unusually elderly population and thus a considerable need for bereavement counselling, follow up could be shared among members of the primary health care team.

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- 1 Blyth A. Audit of terminal care in general practice. *Br Med J* 1990;300:983-6. (14 April.)
- 2 Cartwright A. The role of the general practitioners in helping the elderly widowed. J. R. Coll Gen Pract 1982;32:215-27.
- 3 Wilkes E. ed. A source book for terminal care. Sheffield: Sheffield University Press, 1986.
- 4 Parkes CM. Bereavement, studies of grief in adult life. London: Tavistock Publications, 1972.

Preventing pressure sores

SIR,—It was a pity to see a few inaccuracies in Dr J B Young's wide ranging article on pressure sore prevention, in the same issue as the obituary of Professor A N Exton-Smith, who was a pioneer in this specialty.

The accepted data on capillary blood pressures come from Landis, who measured a mean pressure in healthy volunteers of 32 mm Hg in the arteriolar limb but only 12 mm Hg (range 6-18 mm Hg) in the venous capillary limb. More recent work shows applied surface pressures to be magnified by a factor of three to five internally at a bony prominence. Interface pressures produced by continuous low pressure support surfaces are not low enough to ensure adequate capillary flow in the deep tissues at a bony prominence. It is imperative, therefore, to relieve pressure completely at short intervals in patients at high risk, either by turning or by other equally effective methods.

The airwave system (Pegasus) was devised in close consultation with Professor Exton-Smith to address these problems. It provides complete pressure relief for 20-30% of its 7-5 minute cycle, intermittently allowing full tissue perfusion, and avoiding the need for turning, even in patients at high risk of pressure sores. To avoid infection pinholes for airflow were abandoned over five years ago and a fleece overlay is less commonly used now.

The air support system (Mediscus) was also modified a few years ago to reduce its noise and bulkiness.

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- Young JB. Aids to preventing pressure sores. Br Med J 1990;300: 1002-4. (14 April.)
- 2 Landis EM. Microinfection studies of capillary blood pressure in human skin. *Heart* 1931;vxv:209-28.
- 3 Le KM, Madsen BL, Barth PW, et al. An in-depth look at pressure sores using monolithic silicon pressure sensors. Plast Reconstr Surg 1984;74:745-54.
- 4 Kosiak M. Etiology of decubitus ulcers. Arch Phys Med Rehabil 1961;42 (1):19-29.

Urine analysis for glucose and protein

SIR,-Drs D Mant and G Fowler make some pertinent comments on the proposals for routine urine analysis in general practice. The point about the relatively high cost of fruitless investigation of haematuria is well taken, but the suggestion that testing should include glucose and protein but not blood seems odd. In my survey of urine testing at Nottingham City Hospital nine of 19 diseases (diabetes excluded) were discovered from investigation of isolated asymptomatic haematuria, which came to light only because of routine testing of new outpatients (5886 in total).2 Isolated proteinuria led to only two diagnoses, as indicated by Drs Mant and Fowler, but in eight other cases proteinuria and haematuria were combined. If testing had been for protein alone the yield would therefore have been 10 cases, compared with 17 if testing had been confined to the presence of blood. It is hard to draw any statistically valid conclusions from these figures, but common sense would suggest that if it is worth testing the urine at all it would be best to use a dipstick that shows the presence of blood as well as protein.

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- 1 Mant D, Fowler G. Urine analysis for glucose and protein: Are the requirements of the new contract sensible? Br Med J 1990;300:1053-5. (21 April.)
- 2 Morgan AG. Is routine testing in outpatient clinics useful? Br Med J 1988;297:1173.

The GP contract

SIR,—General practitioners have now had the new terms of service imposed and must accept defeat. We know them to be flawed and likely to fail in their objectives. We have learnt, to our surprise, that we do not have a contract of service. I feel that my professional status has been undermined as I seek to fulfil the paper requirements for a range of services that I believe to be largely unnecessary.

We must now look to see why this has happened and how we can prevent a recurrence. It is easy to blame incompetent leadership, but perhaps it is right to do so. The General Medical Services Committee must have been aware of the thinking in the Department of Health long before the new terms were published, but they seemed to many to come like a bolt from the blue. Is the GMSC the best body to pursue negotiations? There is certainly a possibility that it does not represent doctors' opinions adequately, and I am still mystified about why sanctions were not recommended. There is clearly a problem with local representation through local medical committees, and it remains unclear whether delegates to conferences should vote individually or on instructions. Had it been the latter perhaps we should have seen sanctions applied.

The role of the BMA does not seem to have been helpful to general practitioners. Much of its energy and our money was spent on opposing self governing hospitals and budget holding by general practitioners. But the secretary of state was not coercive on these subjects and left room for individual choice. The problems that general practitioners were having with the new terms of service were largely ignored and correspondence on the topic published in the BMJ was sparse enough to cause comment. Perhaps doctors were writing to those publications that they felt were more sympathetic?

It is obvious that the secretary of state, or perhaps the department, finds both the BMA's and the GMSC's representatives difficult to deal with. Much of the press is intemperate in its criticism of doctors, despite our apparently high standing with the public. We need to address these facts and see how we can improve relationships.

The role of negotiator must be very demanding, and perhaps practising doctors do not have enough available energy. It is not obvious where they find the time. Is there not a strong case for involving BMA officials in these matters to a much greater extent, possibly by employing more doctors full time, with the task of working with the department on a more effective basis? The fact that all doctors do not choose to join the BMA should be overlooked; the percentage increases yearly, and if the negotiating task were well done outsiders would become keen to join. There needs to be an improved organisation at the divisional level to assess and report on local opinion. There should be routine regular meetings with frequent attendance by central representatives so that some purpose is injected into the discussions. Throughout the recent upheavals the role of the BMA has been uncertain-this must surely change.

Such negotiations as there were before the new terms surfaced were kept secret from us all, presumably at the behest of the secretary of state. We now can see that was a bad mistake. We must not allow ourselves to be caught out again.

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Water slide aquaplaning injury

SIR,—The report of a patient who fractured her pelvis by sliding down the central reservation between two escalators¹ reminded me of the comminuted subtrochanteric fracture of the right femur that I sustained on a water slide last

The slide was straight with a launching point about 18 m above pool level. It had an overall gradient of about 1 in 5 with two level sections that enhanced the sensation of flying. The descent was made on a large rubber ring, in the fashion of the youth and sexagenarian depicted in a current advertisement for glyceryl trinitrate, with both feet outstretched.

Unlike the victim of the escalator accident I was completely sober at the time, and this was probably my undoing. My descent was so swift and my balance so perfect that on reaching the pool I aquaplaned across the top of the water, hardly slowing at all, and hit the wall on the opposite side with my outstretched right leg. The fractured femur and an undisplaced fracture of the head of the right radius were the only injuries sustained.

I believe that this is the first case report of a water slide aquaplaning injury. I would have to be extremely intoxicated to venture on a water slide

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1 Twyman RS. Don't slide down the escalator. Br Med J 1990;300: 760. (17 March.)