incentive compared with working in a smaller town, where housing, education, and the cost of living are cheaper, while the quality of life and leisure is better. The medical students we are now teaching see this all too clearly and recognise that general practice offers greater life earnings and a better life style compared with hospital medicine.

In spite of appeals to the local area health authority they neither know nor want to know about the problem and are prepared, it would seem, to accept the lowering of surgical practice to that of a simple emergency service, with empty hospital beds and immensely long waiting lists.

We feel that the already lowered standard of surgery in this area will be reduced to a level where high-standard professional work is no longer possible.

We write this letter because we feel that neither the public nor even our general practitioner colleagues know the difficulties under which we work.

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How effective is measles immunisation?

SIR,—Drs M D Coulter and B M Jones report the occurrence of measles in vaccinated children and ask, "How effective is measles immunisation?" (21 May, p 1347). The Medical Research Council Measles Vaccines Committee has now published three reports covering respectively the first six months, two years nine months, and four years nine months of their trial.¹⁻³ A report after 12 years of follow-up is shortly to be submitted for publication. The high protection rates observed in the early years have been well maintained over the 12-year period; throughout, about 10 times more cases of measles have occurred in unvaccinated as in vaccinated children.

The trial has established that a single dose of live attenuated measles vaccine given at 10 months or 2 years of age confers effective protection on about 90% of vaccinated children over a 12-year period.

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¹ MRC Measles Vaccines Committee, *British Medical Journal*, 1966, 1, 447.

² MRC Measles Vaccines Committee, *British Medical Journal*, 1968, 2, 449.

³ MRC Measles Vaccines Committee, *Practitioner*, 1971, 206, 458.

Medical management of endometriosis

SIR,—In your leading article on this subject (7 May, p 1175) I feel that you are less than fair in your assessment of the effects of pseudo-pregnancy, particularly in your statement that its "beneficial effects . . . are often transient."

The paper by Andrews and Larsen that you cite¹ describes a uniquely unfavourable experience in this field, and our series of some 200 cases in Worcester has shown recurrence of symptoms after five years in no

more than 30%. In more than two-thirds of all cases freedom from symptoms has lasted much longer, in some cases as much as 17 years. The fact that in Andrews and Larsen's patients 19 out of 21 undergoing pelvic operation after pseudopregnancy showed active endometriosis is much less significant than your presentation would suggest. Surely these patients are a highly selected unfavourable group showing either persistent, recurrent, or new foci of endometriosis, which in our case material represents less than one-third of the total. Furthermore, even symptomatic relief for an average of 5½ years may be of value and may afford opportunities for pregnancy and at least the postponement of surgery to an age at which the patient may regard it as less of a disaster.

As regards danazol, it is perhaps unfortunate that you have concentrated entirely upon experience in the United States and that the not inconsiderable body of experience in Britain presented at a symposium at the Royal College of Physicians of London on 29 April was not available to you in time for the publication of your leading article. The findings presented were encouraging and suggest that your optimistic view of the value of danazol in endometriosis may well prove to be justified. In a small preliminary series treated in Worcester during the past three years results have been very good and the incidence of side effects lower than that with combined oestrogen-progestogen preparations. A further study now in progress with lower dosage will, it is hoped, still further reduce side effects while maintaining therapeutic effectiveness.

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¹ Andrews, W C, and Larsen, G D. *American Journal of Obstetrics and Gynecology*, 1974, 118, 643.

Potential of warfarin by azapropazone

SIR,—Recently in Portsmouth we have seen three instances of marked potentiation of warfarin action by azapropazone (Rheumox) which occurred in patients on long-term anticoagulant therapy who were treated for arthritic conditions. They had previously been well stabilised on moderate doses of warfarin. Within a few days of starting treatment with azapropazone all developed bruising and had British prothrombin ratios in the order of 15.0. One patient was taking only one capsule (300 mg) of azapropazone a day. Two of the patients had had cardiac valve replacement and may have had the added problem of mild liver dysfunction associated with chronic congestive heart failure. Their regular dose of warfarin was in the range of 5-10 mg a day, indicating that they were not unduly sensitive to the action of this drug.

Earlier suggestions that the administration of azapropazone to patients previously stabilised on warfarin resulted in an increase in prothrombin time led to an experiment at Bangor in which an attempt to reproduce this effect was conducted with two volunteer subjects. The first was stabilised on adjusted doses of warfarin until a plateau was reached after 12 days. Between day 12 and day 17 the prothrombin time was 23-24 s (twice the mean normal). On day 17 the subject started taking azapropazone 300 mg four times daily. After the first day the prothrombin time rose

to 28 s and the administration of warfarin was stopped. By day 20 the prothrombin time had increased to 48 s (four times normal). Vitamin K was administered and the prothrombin time returned to normal.

The second subject was stabilised at a prothrombin time 1.5 times the normal level of 12 s, the level after 14 days being 17 s. Azapropazone administration was started while the dose of warfarin was maintained at 3.5 mg daily. After two days the prothrombin time had risen to 22 s and by the third day of the combined regimen it had reached 24 seconds. The administration of warfarin was stopped while that of azapropazone was continued for a further two days. The prothrombin time reached a maximum of 30 s by the last day of azapropazone administration and then slowly declined.

On this evidence we feel it inadvisable to administer azapropazone to patients already taking warfarin. This caution should be extended to other oral anticoagulants until current studies produce further information.

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Laparoscopic surgery

SIR,—When first introduced laparoscopy was used with understandable caution in patients who had had previous lower abdominal surgery. It was felt by many that the risks of perforating bowel adherent to the parietal peritoneum precluded the procedure. However, concomitant pelvic adhesions could be present and the cause of infertility.

In 11 selected patients in whom retention of fertility was of great importance a laparoscopic assessment was done 7-10 days after earlier laparotomy had been performed for conditions such as ectopic pregnancy, pelvic sepsis, uteroplasty, or tuboplasty. Selection was based on the presence of persistent pain, pyrexia, or a pelvic mass indicating continuing pelvic pathology. In each case I found significant adhesions. These were all separated readily, but painstaking care was needed to ensure that separation occurred at the line of cleavage so that no damage was caused to the viscera. In three patients oozing persisted from the line of division. Although insufficient to warrant laparotomy, a Portovac drain was inserted and positive vacuum drainage instituted. A specimen of the fluid obtained was submitted for culture and sensitivities to antibiotics when relevant. More recently I have noted that this type of oozing is not seen when laparoscopy was undertaken at an earlier stage—6-7 days after the initial operation. The patients suffered minimum discomfort from this second procedure and all were discharged symptom-free within 24 h of laparoscopy.

These 11 cases were selected from a large and varied gynaecological practice over the past six months. In the first case the patient had had four laparotomies for recurrent