presenting with the severe form of this illness, as described above. Surgery should be avoided,^{1,2} as the majority of cases described have improved with supportive treatment^{1,3} together with systemic and/or local steroids and more recently cholestyramine.⁴ A firm diagnosis can usually be made at sigmoidoscopy and rectal biopsy, thereby distinguishing it from acute ulcerative colitis, which the barium enema cannot do.⁵

Clindamycin-associated pseudomembranous colitis is now well described. Estimates of the incidence in patients taking this drug vary from 0.00001% to 10%.³ As this illness may be severe, protracted, and life-threatening we wish to make a plea that this antibiotic be used only for severe anaerobic infections such as bacteroides septicaemia. We feel that its activity against Gram-positive infections does not justify its use against these organisms as the drug of choice.—We are, etc.,

BARRY R. MILLER
MALCOLM H. WHEELER

University Hospital of Wales,
Cardiff

¹ *British Medical Journal*, 1974, 4, 65.

² *Annals of Internal Medicine*, 1974, 81, 547.

³ Tedesco, F. J., Barton, R. W., and Alpers, D. H., *Annals of Internal Medicine*, 1974, 81, 429.

⁴ Burbidge, E. J., and Milligan, F. D., *Journal of the American Medical Association*, 1975, 231, 1157.

⁵ Shinkin, P. M., and Link, R. J., *British Journal of Radiology*, 1973, 46, 437.

Problems with Naloxone

SIR,—Naloxone is a recently available powerful narcotic antagonist. Its main advantage over similar drugs is that it has no C.N.S. depressant properties in high dosage, which enables large doses to be given to a patient when the exact dose of the narcotic previously administered is not known. When used to treat inpatients given narcotics for analgesia or during anaesthesia this drug is of great value. Problems can arise, however, when giving the drug in cases of self-administered narcotics, particularly in the casualty department.

Firstly, severe withdrawal symptoms may be precipitated by giving naloxone to narcotic addicts. Secondly, patients who arrive unconscious in casualty may become fully alert after receiving adequate dosage of naloxone. However, its duration of action is related to the quantity of narcotic taken, which is usually uncertain. Relapse into unconsciousness and the need for further treatment are always possible. Therefore all patients should be observed in hospital whatever their clinical state after primary treatment.

Because of the involvement of the police in such cases most patients made fully conscious by the narcotic antagonist request their discharge, often becoming very abusive. The medical officer is put in a difficult medicolegal position since not only is he unsure whether the patient will relapse into coma but also the normal discharge form could be held to have been signed while the patient was under the influence of drugs, and may be of doubtful legal worth.

Such unconscious patients would previously have been admitted to hospital and given supportive therapy. Many would have required intubation and ventilation. The introduction of this new drug may radically change the mode of treatment, but not with-

out providing complex medical, legal, and social problems of its own.—I am, etc.,

S. C. ALLEN

Royal Berkshire Hospital, Reading

Breast Cancer in Young Women

SIR,—Though, as you stated in your leading article (21 June, p. 649), breast cancer in premenopausal patients may carry the same prognosis as the postmenopausal disease, the two groups differ in one important way. Robbins and Berg¹ found that the risk of a second primary tumour in the contralateral breast in premenopausal patients was twice that in postmenopausal patients and 10 times the risk of a first primary in the breast in the general population. Similarly, for patients under the age of 45 years at the time of the first primary Veronesi² showed that tumours in the contralateral breast occurred 12 times more often than would be expected on the basis of rates of first primaries.

Among breast cancer patients registered at the Birmingham Regional Cancer Registry³ the risk of a second primary tumour in the contralateral breast was found to decrease with age at first primary (see fig.), ranging

from an 84-fold increase for those aged 20-24 years to a four-fold increase for those aged 40-44 years. Premenopausal patients (3773 women aged 20-44 years at first primary diagnosis) showed an overall increase of 5.6 times expectation, the maximum risk occurring two to three years after the first primary, but the constant three-fold increase between 10 and 24 years after first primary diagnosis is, perhaps, more important in this context.

Furthermore, we have found that the premenopausal breast cancer patient has a three-fold increase in incidence of subsequent primary tumours of the ovary. Whether post-mastectomy pregnancy would enhance or reduce this risk has not yet been evaluated.

In advising the young breast cancer patient it should also be borne in mind that Anderson⁴ reported that premenopausal women with breast cancer and a family history of the disease have an incidence of bilateral tumours as high as 15.5%. Lynch,⁵ also, found a high incidence of breast and

ovarian cancer in three families. Thus not only are premenopausal breast cancer patients at high risk for a second tumour but their female offspring may be more susceptible to early breast cancer.

We acknowledge the support of the Cancer Research Campaign for the survey of multiple primary tumours.

—We are, etc.,

J. A. H. WATERHOUSE
M. P. PRIOR

Regional Cancer Registry,
Queen Elizabeth Hospital, Birmingham

¹ Robbins, G. F., and Berg, J. W., *Cancer*, 1964, 17, 1501.

² Veronesi, U., et al., in *Proceedings of the 5th Perugia International Conference on Cancer*, 1974, ed. L. Severi. University of Perugia, Division of Cancer Research.

³ Waterhouse, J. A. H., and Prior, M. P. In preparation.

⁴ Anderson, D. E., *Cancer*, 1971, 28, 1500.

⁵ Lynch, H. T., and Krush, A. J., *Surgery, Gynecology and Obstetrics*, 1971, 133, 644.

Frusemide-induced Pancreatitis

SIR,—We have read the interesting paper by Dr. P. E. Jones and Dr. M. H. Delbaum on Frusemide-induced Pancreatitis. Some 400 patients are admitted to our coronary care unit each year with acute myocardial infarction. We are aware of acute pancreatitis in the differential diagnosis of precordial pain, because pancreatitis may mimic myocardial infarction in the site of the pain and in E.C.G. changes, but we had not previously seen this disease in vivo or at necropsy in our patients with heart disease. In the last few months, however, we have seen the following two cases.

(1) A 53-year-old woman was admitted with a one-year history of dyspnoea and a feeling of oppression. She had congestive heart failure, low blood pressure, and renal insufficiency. A systolic murmur was heard at the apex. She was mentally slow. The patient was treated with increasing doses of frusemide up to 1000 mg/day; digoxin; phenprocoumon; and, for a short period, metaraminol, and hydrocortisone. An attack of ventricular fibrillation due to hypokalaemia was treated with D.C.-conversion. She improved but complained of abdominal distension and epigastric pain for 24 hours. This subsided gradually during the following week. After 18 days the patient suddenly died. Necropsy showed a hypertrophic heart with dispersed fibrosis but no infarction scars. There were no infarcts in the lungs or occlusions of pulmonary arteries. A small non-bleeding gastric ulcer was found, and the pancreas was acutely inflamed.

(2) A 72-year-old woman with a history of angina pectoris for three years was admitted with an acute myocardial infarction. The patient developed cardiogenic shock and died three days later. She was treated with frusemide up to 240 mg/day, digoxin, and an anticoagulant. Necropsy showed an old and a fresh infarct in the myocardium. There were gallstones but no signs of cholecystitis. The pancreas was acutely inflamed with necrosis and haemorrhages.

These two patients are the first we have seen with serious cardiac disease and acute pancreatitis. Both were treated with frusemide, but we cannot state that it was the cause of pancreatitis. It might have been coincidence, but we shall now be aware of the possibility of pancreatitis after frusemide in high doses in patients with severe heart disease.—I am, etc.,

PAUL STRUNGE

University Hospital,
Odense, Denmark