swab was taken, in four the pus grew staphylococci sensitive to ampicillin, and in two staphylococci insensitive to ampicillin were grown. Eleven grew coliform organisms; six of these were sensitive to ampicillin and the other five not.

Professor Garrod's conclusion that the failure of ampicillin in this series may have been due to the presence of resistant organisms seems to be supported by the present analysis. I regret it is not more complete.—I am, etc.,

A. V. POLLOCK

Scarborough Hospital,
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¹ Pollock, A. V., and Tindal, O. S., *British Journal of Surgery*, 1972, 59, 98.

Causes of Failure in Antibiotic Treatment

SIR,—Professor L. P. Garrod's article (25 November, p. 473) was both informative and interesting, with many important points relevant to current practical problems of antibiotic therapy.

One point needs clarification however. Professor Garrod affirms his strong belief that bacteriostatic and bactericidal drugs in combination should *always* be avoided. Most bacteriologists would agree with him in principle, but a few necessary exceptions must be made. A well-established example of combined therapy with bactericidal and bacteriostatic drugs is in the standard treatment of tuberculosis with streptomycin and isoniazid (both bactericidal) and PAS (bacteriostatic).

Should not an exception also be made in the treatment of brucellosis, especially since co-trimoxazole has not proved to be as effective as was first hoped?¹ Richardson and Holt² have shown a degree of synergism in the action of streptomycin and tetracycline (bacteriostatic) on intracellular *Brucella abortus* in tissue culture, and clinically the combination of streptomycin and tetracycline appears to be the most effective treatment we have for brucellosis.³ Would Professor Garrod agree that brucellosis is another exception, or what treatment would he recommend for acute brucellosis?—I am, etc.,

J. S. CARGILL

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Glasgow

¹ Hassan, A., Erian, M. M., Farid, Z., Hathout, S. D., and Sorensen, K., *British Medical Journal*, 1971, 3, 159.

² Richardson, M., and Holt, J. N., *Journal of Bacteriology*, 1962, 84, 638.

³ Williams, E., *Lancet*, 1970, 2, 604.

Infertility after the Pill

SIR,—I agree with Mr. E. E. Philipp (4 November, p. 294) that the two or three-day hormonal tests for the diagnosis or exclusion of pregnancy are uncertain. They cause unnecessary delay with increasing risks to the patient if the question of termination is being considered. I would, however, not go as far as condemning the use of these preparations altogether.

In cases of amenorrhoea after the pill the possibility of a missed abortion may also have to be considered. A negative pregnancy test does not rule it out, but a negative pregnancy test after amenorrhoea of at least 6 weeks, followed by withdrawal bleeding after two to three days' administration

of an oestrogen-progestogen preparation, excludes a missed abortion and may be followed by resumption of regular menstrual cycles.—I am, etc.,

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General Knowledge of Cancer

SIR,—One welcomes a leading article on such a subject as "General Knowledge of Cancer" (18 November, p. 381) with comment on the valuable work carried out in Manchester with the support of the Department of Health and Social Security and in south-east Wales by the Tenovus Cancer Information Centre in Cardiff. It is a pity that you did not mention the latest publication of the Manchester survey, as Dr. John Wakefield has provided a masterly review of the social behaviour analysis in the Manchester region, and also that no comment was made on the other organizations which have done so much stalwart work in the field of publicity and health education.

What is more significant than the results given in your leading article is the fact that at long last the cancer research organizations and the D.H.S.S. are beginning to provide funds for this vital area of research into publicity, education, and the analysis of population response. For all too long cancer information and prevention organizations have had to manage on what they could obtain through meagre fund-raising efforts of their own, with an occasional donation from certain munificent or dedicated trusts. I refer especially to the Women's National Cancer Control Campaign, started in 1964, which now, with Sir John Peel as president and Lady Llewelyn-Davies as chairman, is supporting screening programmes in numerous boroughs and counties with both static and mobile caravan clinics, and is providing a substantial programme of information, education, and the preparation of a population for a screening programme. It is only by proper pre-selection and preparation of the target population that prescriptive screening will achieve an acceptable priority in competing for the limited N.H.S. funds. But it is the multiple and varied approach to the different herd groups that creates the greater population response and the best economic result.

It is fortunate that such organizations as the W.N.C.C.C. and other more regional ones are now being taken under the wing of the Health Education Council and British Cancer Council, with direct financial support. It is to be hoped that these funds will increase in the future. With judicious control and advice these voluntary organizations will provide an inestimable service in the field of preventive disease.—I am, etc.,

O. A. N. HUSAIN

Chairman,
Medical Advisory Committee,
Women's National Cancer Control Campaign

London W.C.2

Corticosteroids in Retroperitoneal Fibrosis

SIR,—Ureteric catheterization is necessary in most cases of retroperitoneal fibrosis both as a diagnostic step and for kidney drainage in renal obstruction. We report a case here which suggests that if corticosteroid therapy

is given at the time of catheterization and maintained afterwards further surgical intervention for ureteric obstruction may be avoided. Opinions differ on whether corticosteroids can be a substitute for surgery or only adjunctive to it.¹⁻⁷

A 68-year-old man was admitted to hospital complaining of lower abdominal discomfort and backache of eight week's duration. He had a persisting pyrexia, a raised E.S.R., and serum albumin of 2.3 g/100 ml in total serum proteins of 6.8 g/100 ml. Anuria developed suddenly after 27 days. This responded at first to intravenous diuretics, but after 48 hours there was almost complete anuria and the blood urea, previously normal, rose to 230 mg/100 ml. The intravenous pyelogram appearances were compatible with bilateral ureteric obstruction. Cystoscopy and bilateral ureteric catheterization confirmed that the bladder was empty and a free flow of urine was obtained from both catheters. Anuria again developed when the catheters were withdrawn after 36 hours, and further drainage was necessary. Bilateral ureterolysis was performed a fortnight later, when the blood urea was 77 mg/100 ml. The patient was discharged after 24 days. He was passing urine normally, the blood urea was 23 mg/100 ml, and the E.S.R. 4 mm/1 hr.

Six months later he complained of feeling unwell and two months after that the E.S.R. was 120 mm/1 hr and the blood urea 76 mg/100 ml. After ensuring that the urine was not infected, treatment with prednisolone 40 mg daily was begun. Improvement in the subjective symptoms was dramatic and has been sustained for 14 months. During the past 10 months the maintenance dose of prednisolone has been 5 mg twice daily. The E.S.R. is now 44 mm/1 hr and the blood urea 65 mg/100 ml.—We are, etc.,

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J. K. MCCOLLUM

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¹ Ross, J. C., and Tinckler, L. F., *British Journal of Surgery*, 1958, 46, 58.

² O'Regan, R., Treahy, P. A., and Prior, I. A. M., *New Zealand Medical Journal*, 1961, 60, 518.

³ Chew, C. K., Jarzyllo, S. V., and Valberg, L. S., *Canadian Medical Association Journal*, 1966, 95, 1183.

⁴ Charlton, C. A. C., *Proceedings of the Royal Society of Medicine*, 1968, 61, 875.

⁵ Buckberg, G. D., Dilley, R. B., and Lomomire, W. P., *Surgery, Gynecology and Obstetrics*, 1966, 123, 729.

⁶ Mitchinson, M. J., Withycombe, J. F. T., and Arden Jones, R., *British Journal of Urology*, 1971, 43, 444.

⁷ Morandi, L. P., and Grob, P. J., *Archives of Internal Medicine*, 1971, 128, 295.

Pulmonary Aspiration after Fibre-endoscopy

SIR,—I was interested in the article (4 November, p. 269) entitled "Pulmonary Aspiration after Fibre-endoscopy of the Upper Gastrointestinal Tract" by Drs. B. J. Prout and C. Metreweli and, in particular, in the technique of preparing the patient for the procedure.

The analgesic-sedative technique used in this hospital for fiberoptic gastroscopy consists of conventional premedication (pethidine and atropine) followed just before the procedure by an intravenous injection of a mixture containing 0.05-0.1 mg of fentanyl and 5-10 mg of droperidol. This is followed by the intravenous injection of diazepam in a dosage sufficient to cause drowsiness, usually less

than 10 mg. No local analgesic preparation is used. This technique, of course, is not new; moreover, many different combinations of local and general anaesthesia and analgesia are used for this type of endoscopic examination.

The chance of aspiration of pharyngeal contents, either salivary or from the stomach, is always present, irrespective of the technique used, and it is salutary to note that even the use of a cuffed endotracheal tube does not afford complete protection. Dr. S. Mehta¹ has recently described aspiration in 18 out of 90 patients following removal of a cuffed endotracheal tube. He advocated careful placement of the endotracheal cuff just beyond the true vocal cords or the use of a 10° head-down tilt with suction through the endotracheal tube at the end of the operation.

Drs. Prout and Metreweli point out that the aspiration of pharyngeal contents during endoscopic examination of the upper gastrointestinal tract is rarely followed by serious complications. However, if one wished to minimize this aspiration with a technique not using a cuffed endotracheal tube, then probably nasopharyngeal suction during the procedure would be advisable.—I am, etc.,

W. SNIPER

Hairmyres Hospital,
East Kilbride, Glasgow

¹ Mehta, S., *British Journal of Anaesthesia*, 1972, 44, 601.

Delay in Labour

SIR,—With reference to Mr. D. D. Mathews's suggestions in his letter (25 November, p. 487) regarding times to send for medical aid in labour, I wonder whether the second-stage durations are not rather too long.

Apart from maternal or fetal distress the main indication for intervention in the second stage is failure of progression of the presenting part, and I feel it is this fact that should be stressed to pupil midwives and medical students. If the multiparous patient does not deliver within 30 minutes or the primigravida one within 60 minutes, there is usually a cause requiring mechanical assistance. Also, it is unlikely that less than 20 minutes will elapse between a midwife seeking medical help and the subsequent delivery of the baby. Thus in providing a guide, I consider it would be wiser to quote the shorter times.—I am, etc.,

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Carcinoembryonic Antigen in Urine of Cancer Patients

SIR,—Mr. R. R. Hall and others reported recently (9 September, p. 690) on the demonstration of increased levels of carcinoembryonic antigen (C.E.A.) in the urine of patients with urothelial carcinoma by the radioimmunoassay method. Also, they stated that "C.E.A. does not appear in the urine with most non-urothelial tumours even when the plasma level is raised unless such tumours involve the urothelium secondarily . . ."

We have reported^{1,2} the finding of C.E.A. in the urine of patients with colonic car-

cinoma by means of the immunodiffusion test. Urine specimens collected over 24 hours were dialysed overnight against distilled water in 23 × 32-in (58.5 × 81.3-cm) Visking tubes and lyophilized or concentrated by ultrafiltration through a Diaflo type UM-10 ultrafilter. Perchloric acid extracts were obtained from parts of each urine specimen. Specific antisera were prepared according to the method described previously³ and the specimens were also tested against antiserum obtained from Dr. P. Gold's laboratory in Montreal.

Of 18 urine specimens from patients with colo-rectal cancer, two were found to be C.E.A.-positive against our antisera and against antiserum obtained from Dr. Gold. Neither of these two patients was known to have urogenital involvement by his neoplasm. None of 107 urine specimens from other cancer patients and 50 from non-cancer patients and healthy subjects were found to contain C.E.A. by the immunodiffusion test. We feel that the use of a more sensitive technique such as radioimmunoassay will increase the incidence of C.E.A. detected in the urine of cancer patients, especially those with increased C.E.A. levels in plasma.

Further, Mr. Hall and his co-workers suggested that measurement of urinary C.E.A. is of clinical diagnostic value in the detection and follow-up of urothelial carcinomas. Our two patients with positive C.E.A. in the urine were treated with 5-fluorouracil intravenously and both experienced subjective and objective tumour response. On repeating the test for C.E.A. in their urine during tumour regression, none was found by the method used. We suggest that serial follow-up of the plasma and/or urinary level of C.E.A. may aid in the evaluation of tumour responses to therapy.—We are, etc.,

MUHYI AL-SARRAF
KAREL KITHIER

Department of Oncology,
Wayne State University
Detroit, Michigan, U.S.A.

¹ Kithier, K., Al-Sarraf, M., Cejka, J., and Vaitkevicius, V. K., *Proceedings American Association for Cancer Research*, 1972, 13, 66.

² Kithier, K., Al-Sarraf, M., and Cejka, J., *Proceedings Second Conference and Workshop on Embryonic and Fetal Antigens in Cancer*, In press.

Methylcellulose in Diverticular Disease

SIR,—In his paper on the effects of methylcellulose on intracolonic pressures in diverticulosis (23 September, p. 729) Mr. John Hodgson showed that in the cases he studied a manufactured bulk-former lowered these pressures and was helpful clinically. While his experience supports the view that a high-residue diet will lessen the pressures of the colon and relieve symptoms, it is a pity that he studied cellulose in preference to unprocessed bran.

Admittedly it is safe, by and large, to maintain patients on methylcellulose, but it must not be forgotten that only last year attention was drawn¹ to the fact that "hydrophylic colloid purgatives have very occasionally caused bolus obstruction," cases reported in 1965 by Souter² being cited. There have been other reports of faecal obstruction after the administration of either bran or granules made from natural unprocessed gum.—e.g., sterculia. This is probably due to their tendency to remain particulate when

wet, whereas other bulk-formers may clump and cause obstruction.³

It would be a pity if Mr. Hodgson's study, albeit unintentionally, persuaded clinicians that methylcellulose was the "drug of choice" in the treatment of diverticular disease. Unprocessed bran is the most natural, safest, and cheapest material available and, now that finely ground bran is on the market, most patients can take it without difficulty. However, a few will not tolerate bran and these should be given the safest alternative, which is sterculia.

A. Z. ALMEIDA

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London N.W.11

¹ *Lancet*, 1971, 2, 253.

² Souter, W. A., *British Medical Journal*, 1965, 1, 166.

³ Painter, N. S., *Lancet*, 1971, 2, 381.

Use of Surgical Beds

SIR,—We are all aware that there are marked discrepancies in the waiting times for surgical beds in various parts of the country and that in some areas patients may have to be signed off as unfit for weeks, months, or even years before simple matters such as hernias, gall bladders, or haemorrhoids can be attended to. At the same time, owing to the shift of population from Central London, there are, to my knowledge, hospitals in London which, though busy, can arrange an outpatient's surgical appointment within a week of request and the patient, if his condition is of any urgency, can be admitted within the next two or three weeks.

Some enterprising general practitioners have taken advantage of this situation, and it would seem that if some central national information bureau could be established where comparative waiting times could be listed this might be a help to both practitioner and patient alike.—I am, etc.,

J. H. L. FERGUSON

London, N.W.1

Radioactive Bromide Partition Test in Tuberculous Meningitis

SIR,—Our two patients who were included in the series reported by Dr. B. K. Mandal and his colleagues (18 November, p. 413) offer a striking illustration of the diagnostic value of the radioactive bromide partition test. The patients were immigrants and were man and wife. A diagnosis of tuberculous meningitis was established in the husband and when the wife was admitted some three months later, also with a lymphatic meningeal reaction, the same diagnosis was naturally suspected. The partition test, however, showed the meningitis to be of viral origin, and the measles antibody titre later rose from 1/640 to 1/2,560. The partition test thus served to refute what had at first appeared to be a promising clinical lead.—We are, etc.,

J. SHAFAR
D. HOLLANDERS

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Insulin Abuse by a Drug Addict

SIR,—With the increasing frequency of drug addiction, doctors are often faced with serious clinical problems, occasionally diagnostic, particularly when the history of addic-