A.C.T.H. release are still circulating for very considerable times after injection of methylprednisolone.

Studies on our own patients and observations by *Jacombe et al.*¹ suggest that after 17-20 days the resting plasma cortisol had returned to within the normal range, presumably because by this time there is little or no circulating exogenous steroid. Nevertheless, in our own study the adrenal response to A.C.T.H. remained suppressed beyond this time, and even in patients studied for 60 days did not regain its former levels. We therefore considered that this degree of depression of adrenal response represented a recovery phase following the disappearance of exogenous steroid from the plasma.

It seems important to re-state the conclusion which we drew in our paper—that is, that this small degree of suppression would probably be unimportant if only two doses of methylprednisolone were given. A more prolonged course of treatment though might produce correspondingly greater effects.—We are, etc.,

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V. H. T. JAMES.

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REFERENCE

- ¹ Bain, L. S., Balch, H. W., and Jacomb, R. G., *Annals of Physical Medicine*, 1967, 9, 43.

Breathlessness and Anxiety

SIR,—We read with much interest the paper by Dr. N. C. Oswald and others (4 April, p. 14), relating respiratory disability and personality attributes. As we are engaged on similar work, though with asthmatics only, may we refer to three points from their careful study?

While data on, *inter alia*, 51 male and 58 female asthmatics was reported, the proportions of these that were attending for the first and for follow-up consultations were not mentioned. We believe that conclusions must be drawn only warily from cases who attend clinics regularly—anxiety may be as important a determinant of such attendance as the severity of pulmonary disorder.

In 1956, Professor Linford Rees¹ reported a study of a large number of asthmatics, and found that more of them were obsessional, sensitive, anxious, and under-confident than controls. We have just reported² confirmation of this observation, but in a study of a much smaller number of patients drawn randomly from a register, and of normal and neurotic controls. We noted that these are the very traits which might be associated with failure to adapt to distress, and with a tendency to reiteration of complaint. Conclusions about psychopathology in bronchial asthma (or indeed in bronchitis or in any other disease) can be made only from studying a sample as truly representative as possible of the whole asthmatic population. Failure to attend to this principle has produced much worthless speculation in psychosomatic medicine.

Partly on account of its fluctuating nature, the severity of asthma as an illness is notoriously difficult to grade. We are not confident that subjective answers to questions on severity of breathlessness are appli-

cable in the present context. One arbitrary criterion of severity is whether corticosteroid treatment is required. In an extended sample of our own, women requiring such treatment had lower Eysenck Personality Inventory (E.P.I.) neuroticism scores (mean 10.6, s.d. 4.7, $n=26$) than those not on these drugs (mean 14.1, s.d. 4.6, $n=19$) ($p<0.02$). This was in contrast with the men on steroid treatment who returned scores (mean 9.4, s.d. 5.7, $n=9$) which were similar to those not so treated (mean 9.4, s.d. 5.9, $n=14$). In a smaller sample we found² that a group with severe pulmonary disorder—in terms of more likelihood to have been in hospital for treatment, a poorer F.V.C., and a greater need for corticosteroids—displayed less neurotic traits at interview, had lower psychophysiological activation (particularly in amount of hyperventilation), and less abnormal scores on psychometric tests. The implications of these observations are contrary to the relationship between breathlessness and anxiety suggested by Dr. Oswald and colleagues. We believe that the more prone a patient is to anxiety, the more he will be distressed by breathlessness—and that this is determined by more than pulmonary disease.

Dr. Oswald and his colleagues advocated the use of psychometric tests to screen clinic attenders for neuroticism. The E.P.I. is a poor test for reliably discriminating the abnormal individual. From data in the E.P.I. manual, the average neurotic patient's score on neuroticism lies at only the 89 percentile of a normal sample. While we advocate a broader approach to assessment of psychopathology^{2,3} we support wholeheartedly Dr. Oswald and colleagues' plea that emotional factors should be taken into account in the management of patients with bronchial asthma or bronchitis—or indeed with any other distressing disease.—We are, etc.,

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R. C. B. AITKEN.

University Department of Psychiatry,
Edinburgh.

REFERENCES

- ¹ Rees, L., *Journal of Psychosomatic Research*, 1956, 1, 98.
² Zealley, A. K., Aitken, R. C. B., and Rosenthal, S. V., *Scottish Medical Journal*, 1970, 15, 102.
³ Aitken, R. C. B., Zealley, A. K., and Rosenthal, S. V., *Journal of Psychosomatic Research*, 1969, 13, 289.

Depressive Illness in General Practice

SIR,—May I reply to Dr. M. J. Wooldridge and Dr. P. J. V. Beumont (18 April, p. 175)? I share Dr. Wooldridge's concern about classification. In the original draft of my paper I included case histories to show the type of patient I had admitted and—more important—the type I had not admitted; unfortunately this section had to be left out because of lack of space. I submit that the length and complexity of Dr. Wooldridge's observations about classification confirm the original wisdom of admitting patients who said they were depressed, and went on saying it, rather than those who seemed to conform with psychiatric classifications—I could identify the former, but not the latter.

May I comment on some other points in Dr. Wooldridge's letter? I excluded 11, not 33, patients from the trial of imipramine

(Table VI, p.775); 33 patients failed, for various defined reasons, to contribute useful data to the trial. Dr. Wooldridge writes: "the failure to fall sick more frequently in the premenstrual period is puzzling. . . ." I did not attempt to define where in the menstrual cycle patients "fell sick," only when they "reported sick." It was the day of presentation which was related to the menstrual cycle. Again Dr. Wooldridge writes: "I would finally criticise an assessment of a tricyclic drug over such a short period given in a standard dose of 75 mg./day." In the section entitled "Tablets and Dosage" (28 March, p. 776) I wrote: "If at the end of the first week the response to treatment was indifferent the dose was increased to two tablets three times a day;" the strength of the tablets (25 mg.) was defined in the text and the daily intake for these patients was, therefore, equivalent to Dr. Wooldridge's recommended minimum dose of 150 mg.

In reply to Dr. Beumont's inquiry, one patient only in my series succumbed to depression within six weeks of delivery. The demographic distribution of my depressed patients (women more than men, married women particularly, spinsters rarely) is puzzling. It might be explained by postulating that sexual fulfilment and sexual ignorance protect, but repeated sexual experience without orgasm, predisposes. Other factors are social isolation and the wear and tear of caring for a young family.

In the controlled trial of imipramine 19 patients were overt defaulters (failed to reattend or admitted a failure to take tablets); 14 of these had been allotted to the imipramine group. It has been pointed out to me that if these patients lapsed because they had in fact got better and saw no point in reattending, then their exclusion from the assessment might bias the results against the drug. The reasons for lapsing have been analysed elsewhere¹ and probably only four out of the 19 lapsed because of improvement. Their inclusion in the assessment seemed neither desirable nor important.—I am, etc.,

ALAN PORTER.

Camberley, Surrey.

REFERENCE

- ¹ Porter, A. M. W., M.D. Thesis, University of London, 1968, p. 164.

Crohn's Disease and Pregnancy

SIR,—In view of the evidence presented by Drs. J. F. Fielding and W. T. Cooke (11 April, p. 76) that pregnancy does not have any adverse effect on the course of Crohn's disease, it seems pertinent to add a note of caution to their optimism. We have seen two patients suffering with Crohn's disease who have had rare, life threatening complications associated with their pregnancies.

A 24-year-old woman with no known gastrointestinal symptoms was well during her first pregnancy in 1968 until 37 weeks. Pain then developed in the region of the right hip and a large, soft-tissue swelling, bluish in colour, appeared above the right iliac crest. The swelling was incised and a mixture of pus and gas released. Bacteriological culture of the pus grew *Clostridium welchii* and she was treated with anti-gas-gangrene serum, penicillin, and hyperbaric oxygen. A stillbirth occurred 24 hours later. Subsequently extensive debridement

of the area was performed, and a fistula was found communicating with the terminal ileum. She recovered from her gas-gangrene infection and one month later had a right hemicolectomy performed for Crohn's disease, which was confirmed histologically in 25 cm. of the terminal ileum. She has since made a good recovery and has had no more fistulae.

A 26-year-old woman had been suffering with Crohn's disease confined to the terminal ileum for three years when seen in 1965. She became pregnant, and at four months developed pain in the right hypochondrium radiating round her right lower ribs to the back. She was tender in this area but no other abnormality was found. The pain continued to trouble her throughout her pregnancy. At term a healthy child was born. One month later the pain suddenly became more severe and was associated with sweating and rigors. She was treated with antibiotics and a mass appeared in the right hypochondrium. Seven weeks after delivery a liver abscess was drained. The pus was bacteriologically sterile. Subsequently she made a good recovery and remains well, apart from residual thickening of the terminal ileum.

The clinical course of Crohn's disease is often difficult to forecast. This also applies equally to the disease during pregnancy. Crohn¹ took the view that if the onset of the disease occurred during pregnancy then its subsequent course was severe. Our first case suffering from gas gangrene as a result of Crohn's disease would support this view. The second case, who was under steroid therapy for the whole duration of her Crohn's disease, demonstrates that complications occurring during pregnancy can be exacerbated during the puerperium.

We wish to thank Mr. H. M. Goldberg, under whose care these patients were, for permission to report these cases.—We are, etc.,

B. HEYWORTH.
S. BASU.
J. CLEGG.

Crumpsall Hospital,
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REFERENCE

- ¹ Crohn, B. B., Yarnis, H., and Korelitz, B. I., *Gastroenterology*, 1956, 31, 615.

SIR,—Dr. J. F. Fielding and Dr. W. T. Cooke (11 April, p. 76) in their interesting article on pregnancy and Crohn's disease point out that pregnancy has little effect on the course of the disease but observe a decrease in fertility in patients with Crohn's disease. From observations in patients attending the Cleveland Clinic, Ohio, we would agree with these two points, but our experience with regard to problems with the fetus has not been as happy as that of the Birmingham workers. In our series there appears to be an increased risk to the fetus. It is difficult to be certain of all early abortions so we have included only pregnancies going beyond the first trimester.

Number of pregnancies in Crohn's disease	34
Stillbirths or spontaneous abortion after the first trimester	8
Premature births	2
Abnormal fetus	2

There is a marked difference between Drs. Fielding and Cooke's patients and those which we are reporting here in that the majority of the former had small bowel Crohn's disease and the majority of the latter had large bowel Crohn's disease.

However, we feel that the figure of 12 abnormalities in 34 well-established pregnancies is sufficiently great to sound a note of caution. Incidentally, we have observed only two stillbirths in 31 pregnancies in patients with total colonic involvement with mucosal ulcerative colitis.

We would speculate that the severity of the illness is a factor which may lead to problems with the fetus, and the difference in distribution of the lesions in these two reports of pregnancy in Crohn's disease may well be a significant factor accounting for the observed differences.—We are, etc.,

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W. A. HAWK.

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Campbell de Morgan Spots

SIR,—Dr. H. P. Ferrer in his letter (7 March, p. 628) suggests that the outbreak of Campbell de Morgan spots was of food-borne origin. This was considered very carefully and ultimately discounted when it became apparent that controls in Liverpool had the same incidence of lesions, and no foods common to all patients could be found. The outbreak was certainly not confined to institutions, as he suggests, for our outpatients here and in Westmorland were similarly affected. A leading article in the *Lancet* (18 April, p. 824) mentions an autumn outbreak in Cumberland, but this also followed an increase in ambient temperature.

One of our reasons for describing the outbreak was that others, knowing its benign nature, might then be spared alarmist press publicity.—We are, etc.,

R. H. SEVILLE.
G. BIRCHALL.

Beaumont Hospital,
Lancaster.

General-practitioner Anaesthetists

SIR,—I have been most interested in the "Unheard Voices" series, especially that of the consultant anaesthetist (4 April, p. 45). As such a one of 18 years standing, 12 years in the North and subsequently in the South, I must most vehemently disagree with Dr. Cadwallader's adamant rejection of part-time help from general practitioners.

I am motivated to write this rebuttal by my deep indebtedness to the general-practitioner anaesthetists without whose help down the years life as a provincial consultant would have been the stuff of nightmares. Many of the doctors in question reached registrar standard as full-time anaesthetists before taking up general practice. One subsequently reversed the process, took his Fellowship, and became full-time consultant.

Those personally trained required close supervision over many months. The eventual result is a safe and efficient team with

a permanent career interest in hospital work. No one is exploited, and the heavy emergency load, inevitable in the specialty both during the week and over the weekend, is spread sufficiently thinly to be painless.—I am, etc.,

D. F. REES.

Ventnor,
Isle of Wight.

Drug Neutropenia

SIR,—Mohan¹ reported a patient who bled severely because of platelet deficiency due to the drug Septrin. During the past three months I have seen two women and one man with dangerous blood dyscrasias closely related in time to taking Septrin (trimethoprim and sulphamethoxazole).

The first patient, aged 61, was seen at home on 28 December, 1969 with bronchopneumonia which had been treated with Septrin 1 tab. t.d.s. for four days, and ampicillin for one day. He was deteriorating rapidly with a fever of 104.6° F. (40° C.), and on admission to hospital was found to have only 1,800 W.B.C./cu.mm. and two days later 1,600 W.B.C./cu.mm. and platelets 70,000/cu.mm. By 6 January his W.B.C. and platelets had risen to the lower limits of normal, and his pneumonia had responded to large doses of penicillin and prednisone.

The second patient aged 63, had received two courses of Septrin tabs. 2 b.d. from 19-26 January, and 1-12 February for P.U.O. eventually diagnosed as subacute bacterial endocarditis. Four days after the end of the second course she was admitted to hospital because she was less well and was found to have no granulocytes at all, whereas the W.B.C. had been normal with a normal differential on 2 February. However, retrospectively, mild neutropenia had begun to show on 10 February with 54% of 4,200 cu.mm. Sternal puncture on 17 February showed a highly cellular marrow; myelocytes and metamyelocytes but no neutrophils—for example, a maturation defect. Serum folates were normal 340 µg./ml. She recovered, and the blood picture was normal by 27 February, eleven days after her agranulocytosis.

The third patient, aged 74, had received eight days Septrin tabs. 2 b.d. for a urinary tract infection when she developed extensive purpura on 5 April. Her platelet count was 18,000 cu.mm. and W.B.C. 4,500 cu.mm. Septrin was stopped, and the patient admitted to hospital. Fortunately no further bleeding occurred and her platelets returned to normal within eight days.

We are assured that these complications are rare with Septrin, but the quoted experience in so short a time leads one to question this, and to ask how often patients already debilitated are having to fight off pyogenic chest infections, or perhaps failing to do so, with a neutropenia of which no one is aware.—I am, etc.,

J. W. PAULLEY.

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Ipswich.

REFERENCE

- ¹ Mothan, P., *Practitioner*, 1969, 202, 553.

Smoking and Bronchitis

SIR,—In your leading article on bronchitis (25 April, p. 190) you state that "preventive measures are unlikely to have much impact on the frequency of chronic bronchitis in adults unless ways and means are found of drastically reducing the cigarette-smoking habits of the population."

One obvious preventive measure is to try to stop children from smoking, and there is