the bone marrow aplasia or to the immune deficiency. Only systematic studies with the M.L.R. test in these two states will answer the question.—We are, etc.,

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Adrenal Failure in Bronchial Asthma

SIR,—In view of recent publications[1-3] and correspondence,[4 5] including the report of a death,[6] concerning the substitution of beclomethasone dipropionate by inhalation for systemic corticosteroid therapy in bronchial asthma, we wish to record the following case to emphasize that, even when the maintenance dose of prednisolone is reduced slowly, clinical manifestations of adrenocortical hypofunction may appear.

A man aged 43 started regular treatment with oral prednisolone for chronic asthma in 1958 and was stabilized on a maintenance dose of 7·5 mg daily. In December 1972 beclomethasone dipropionate 100 μg four times daily by inhalation was added to this treatment, and after two weeks the dose of prednisolone was reduced to 6 mg daily. The dose had to be temporarily increased to 20 mg daily a few weeks later because of a recurrence of asthma associated with an influenzal illness. From March 1973 further reductions in dose of 1 mg per day were made at monthly intervals without any subsequent deterioration in the forced expiratory volume in one second (FEV_1), which remained in the range 1·3-1·6 l. In July, after the dose of prednisolone was reduced from 2 mg to 1 mg daily, he started to complain of malaise, weakness, lethargy, and pains in the back and lower limbs. When prednisolone was withdrawn a month later he felt much worse and was noted to have lost 5 kg in weight over a period of three months. His FEV_1 was unchanged at 1·6 l., the blood pressure was 120/80 mm Hg, and the serum electrolytes were normal. The morning basal plasma cortisol was 4 μg/100 ml and rose to only 12 μg/100 ml 30 minutes after 0·25 mg of tetracosactrin by intramuscular injection. Treatment was started with 7·5 mg of prednisolone daily along with 40 units of corticotrophin gel twice daily, and within 24 hours he was free of symptoms.

We regard as highly undesirable any technique for the substitution of beclomethasone dipropionate by inhalation for prednisolone by mouth which aims at a complete withdrawal of prednisolone within four days, as advocated by Brown and his colleagues.[1] These authors observed symptoms of adrenocortical insufficiency in 17 of their 37 steroid-dependent asthmatics, but in this unit, though over 100 asthmatics have been converted from systemic corticosteroid therapy to beclomethasone dipropionate by inhalation, the patient described above is the only example of clinically apparent adrenocortical insufficiency so far encountered. It is our practice to rely on a very gradual reduction in the dose of prednisolone (1 mg per day each month) to allow time for restoration of normal hypothalamo-pituitary-adrenal function, in an effort to prevent the unpleasant and potentially avoidable symptoms of adrenocortical insufficiency, and its more serious consequences.

We do not perform tetracosactrin tests as a routine on patients receiving long-term corticosteroid therapy before starting conversion to beclomethasone dipropionate, as advocated by Dr. A. O. Robson.[4] In a pilot survey of 20 patients on an average maintenance dose of 10 mg of prednisolone daily[7] we found almost complete loss of plasma cortisol response to tetracosactrin in every case, and it thus seemed improbable that this test would help to discriminate between patients who were liable to develop adrenocortical insufficiency and those who were not. Furthermore, we doubt Dr. Robson's premise that a test of adrenocortical function is a useful means of assessing the response to stress of the whole hypothalamo-pituitary-adrenal axis.—We are, etc.,

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Problem Oriented Medical Record

SIR,—The comments by Dr. P. H. M. Carson (23 June, p. 713) concerning the problem oriented method of clinical recording should be answered, particularly since they come from someone who has worked as a colleague of Dr. L. Weed.

I accept the criticism that the problem oriented style of recording is not necessarily superior to the traditional format for most of the purposes which Dr. Carson mentions, but I would not dismiss quite as quickly as he does the possibility that clinicians and their patients might benefit from the automated handling of clinical data—and for this purpose a well structured record is highly desirable.

The main point on which I would take issue with your correspondent, however, if I understand both him and Dr. Weed correctly, is that what was intended by its designer to be the main advantage of the problem oriented record is seen by Dr. Carson as its major drawback. The potential value of the problem oriented method lies in the fact that those who use it can display their understanding of the cases which they are treating by the manner in which they structure their records. If data allocated to a problem are inconsistent or irrelevant the recorder can seek guidance if he recognizes the anomaly himself, or can be offered teaching if it is detected by a more experienced clinician.

Whether or not the problem oriented style of recording is an improvement on traditional methods depends to a very great extent on whether or not advantage is taken of the opportunities which it offers for educational dialogue. If the method is looked on merely as a new format for clinical data, Dr. Carson is right—adoption of the method accelerates the tendency for recording to become a ritual rather than activity with clinical significance, and attention is directed away from the patient. If, on the other hand, the method is regarded as a way of exploring and improving the understanding of a patient's condition which is displayed by his closest medical attendant, the problem oriented style draws the medical record into the centre of clinical activities as a working document with considerable potential for improvement in patient care. In this regard, the method developed at the Walter and Eliza Hall Institute seems to have some advantages over the style proposed by Weed.[1]

Proper use of the problem oriented method therefore necessitates the recognition of medical records as educational instruments, and this requires a revision of philosophies concerning clinical recording and of role perceptions by all concerned. A proportion of clinicians, particularly the more recently qualified, appear to find this re-evaluation relatively easy, but that the majority find it a punitive and possibly pointless process is attested by all those who have written of the difficulties of implementing problem oriented systems.

It seems naively optimistic to hope that the medical profession will feel thoroughly comfortable with the problem oriented record before 20 years or more have passed, and until that time we shall need men like Dr. Weed to sustain our efforts. It will also be useful to have men like Dr. Carson to make us examine our objectives.—I am, etc.,

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Short Boys

SIR,—It is curious that the subject dealt with in your leading article (4 August, p. 245) should have appeared under this title, and have received so little attention. Surely, the vast majority of these boys are normal late developers?

You do state that "slow growth of their child is a common reason for parents to seek medical advice." It has been said that common things commonly happen, but, without mentioning the common basis, fringe cases are offered treatment which for most would be alarming and unnecessary. Fortunately you quote the wise advice "wisdom suggests that the paediatrician stay his hand in the 'usual' case." This still holds good.

It has been shown[1] that severe emotional disturbance can retard growth and intellectual development, but perhaps the situation is put into better perspective by considering the matter as one of the normal development curve—late development as opposed to early development.

In my experience over 20 years with more than 9,000 boys and 5,000 girls between the ages of 15 and 18, rather over 10% of boys were physically late developers and about the same number early developers who were physically nearer adults. Among girls there