Adrenal Failure in Bronchial Asthma

Sir,—In view of recent publications1,2 and correspondence,3 including the report of a death,4 concerning the substitution of beclomethasone dipropionate by inhalation in the treatment of 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, slow withdrawal of beclomethasone hydroxypropionate 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 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 influenza 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 (FEV1), which remained in the range 1·3-1·91. In July, after the dose of prednisolone was reduced from 2 mg to 1 mg daily, he started to complain of minimal bronchospasm and pain 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 When prednisolone was withdrawn a month later he felt much worse and was noted to have lost 5 kg in weight over the previous three months. His FEV1 was unchanged at 1·61, 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 would involve a complete withdrawal of prednisolone within four days, as advocated by Brown and his colleagues.1 These authors observed symptoms of adrenal insufficiency in 17 of their 37 steroid-dependent asthmatics, but in theirs, as in ours, 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 adrenal 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 hypothalamic-pituitary-adrenal function, in an effort to prevent the unpleasant and potentially serious symptoms of adrenal insufficiency, and its more serious consequences.

We do not perform tetracosactrin tests as a routine on patients receiving long-term corticosteroid treatment, and we do not consider that the usual version to beclomethasone dipropionate, as advocated by Dr. A. O. Robson,5 in a pilot survey of 20 patients on an average maintenance dose of 10 mg of prednisolone daily6 we found the almost complete loss of pituitary-adrenal response to tetracosactrin in every case, and it thus seemed improbable that this test would help to discriminate between patients who were likely to develop adrenal-cortical insufficiency and those who were not. Furthermore, we doubt Dr. Robson's premise that a test of adenocortical function is a useful means of assessing the response to stress of the whole hypothalamic-pituitary-adrenal axis. We are, etc.,

Adrenal Function in Bronchial Asthma

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2 Carson, R. J., and Eliza, W. P., et al., personal communication.


5 Hartzman, R. J., W. P., et al., personal communication.


10 Carson, R. J., and Eliza, W. P., et al., personal communication.


Problem Oriented Medical Record

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

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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 through the way 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 organization and presentation. If the method is locked 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 clinical signs and symptoms, 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 valuable and meaningful documents, and this requires a revision of philosophies concerning clinical recording and of role perceptions by all concerned. A problem oriented medical record includes, in particular 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 experienced the difficulties of implementing problem oriented systems.

It seems naive optimistic to hope that the medical profession will feel thoroughly comfortable with the problem oriented record before 10 years or more has passed, and until then 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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1 Mather, B. S., National Hospital, 1973, 17, 13.

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, with the commendation of the common cases and their more expected treatment which for most would be alarming and unnecessary. Fortunately you quote the wise advice “wisdom suggests that the paediatrician stay his hand in such cases and let well alone.”

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

In my experience over 20 years with more than 1000 boys and girls this 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