

some potassium depletion may be induced. In high doses diamox can cause paraesthesiae, and also drowsiness and even psychosis; the mechanism of these neurological disturbances is not established. If the effect in the two patients mentioned is limited to tolerable subjective sensations, and the drug is otherwise effective, it should be continued; but more severe neurological involvement would be an indication for stopping the drug completely and trying other methods of therapeutic sodium depletion.

Acetylcholine in Psychiatry

Q.—*Acetylcholine has been used to treat cases of anxiety or obsessional behaviour. Could you give me further details about the type of case suitable for the treatment and the results obtained?*

A.—Acetylcholine treatment, as the inquirer states, has had its most successful effects in certain obsessional and anxiety states. The obsessional patients who have done best with it are those in whom the symptoms took predominantly the form of compulsive ruminations; patients in whom the ruminative tendency did not bulk large, but who suffered from repetitive routines of behaviour, etc., have not been found to respond nearly so well. Compulsive behaviour is usually little influenced by the treatment. The treatment is certainly worth trying in patients aged from 25 to 50—that is, neither the very young nor the old—and when the illness is not of very long duration. The tendency to rumination is reduced and the associated tension as a rule diminishes to a very satisfactory degree.

In patients suffering from anxiety states it is again the symptom of tension which is most favourably affected by the treatment. Fluctuating tension responds better than persistent tension. Anxiety states in which somatic symptoms, tachycardia, sweating, tremor, etc., are prominent do not do so well.

Persons of athletic build respond better than those of asthenic build. The treatment should not be given where there is any evidence of cardiac disease. Phillips and Hutchinson¹ in a selected series reported 70% improvements.

REFERENCE

- ¹ *British Medical Journal*, 1954, 1, 1468.

Trace Elements

Q.—*The agricultural community in which I work in Southern Rhodesia is very trace-element conscious, though most farmers lack the facilities and cash for accurate soil analysis. Undoubtedly our soils are poor, and one of the remedies suggested is the application of powdered seaweed. The argument is that dairy and poultry products from stock fed on crops grown with this as fertilizer will contain all the trace elements and be better human food. Is this correct?*

A.—The mineral nutrients essential for man are of two main groups; the first includes iron, calcium, sodium, potassium, phosphorus, and chloride, which are needed in considerably larger amounts than those in the second group, the trace elements proper, which are needed in exceedingly small quantities. The desirable dietary levels of some of these elements—e.g., copper, iodine, and fluorine—are known, but relatively little is known about those for such elements as cobalt, molybdenum, zinc, manganese, and magnesium, all of which are, however, known to be essential components of various biological systems.

It is generally believed that sufficient of each of the trace elements is present in ordinary diets; on the other hand, evidence of deficiency of such elements as cobalt and molybdenum has been recognized clinically in domestic animals. It would seem that the proper treatment of mineral deficiencies in livestock is to apply fertilizers containing the trace elements which are deficient in the soil so that the amounts of those elements in the crops are increased. Not only are adequately fertilized soils important for obtaining

a satisfactory mineral content of the crops raised thereon, but the health and yields of crops and of livestock and the nutritional value of animal food products will be improved, and to the extent to which man obtains his food from such sources his dietary supply of the necessary trace elements will be secured.

The risk inherent in relying on a single source for a group of nutrients is that, in taking the amount necessary to supply some of them, certain other constituents may be taken in the wrong proportion. One example well known to South African farmers is the problem of administering to cattle minerals from certain sources: they are sometimes faced, when providing calcium and phosphorus, with the risk of producing fluorosis. Generally the procedure of choice is to inject the minerals which are in short supply into the biological cycle as a soil fertilizer, but, as in nutritional evaluations of food for man and animals, it is not enough merely to rely on chemical analyses. If indeed facilities for research are limited, it would be preferable to make suitable fertilizer trials rather than chemical analyses when trace-element deficiencies are suspected. As in animal nutrition, the new knowledge of "clinical" signs of malnutrition in plants, as well as yield data, may be used as criteria of the nutritional value of the soil and fertilizer. An outstanding exception to this general procedure is the correction of iodine deficiency by iodization of domestic salt.

Facial Hair in a Girl

Q.—*Have you any information, please, regarding the removal of facial hair in a girl of 18? Her mother asked me about electrolysis, but I think there is bound to be minute scarring after it, and I also understand that there is a general distribution of excess hairiness over the body. Menstruation is normal. I wondered whether there is any hormone treatment available.*

A.—In the great majority of cases no medical treatment is any good. In particular hormone treatment is valueless. However, a small minority of cases of hypertrichosis are due to adrenal hypertrophy, and this diagnosis should be excluded by urinary hormonal estimations.

Electrolysis, skilfully applied, leaves negligible scarring, but of course every hair has to be separately treated, and it is therefore not a very suitable method when the hypertrichosis is very severe or very widely distributed. It is worth noting that the popular view that shaving stimulates the growth of hair is untrue, and in many instances this is the best line of treatment if the patient can be persuaded to adopt it. It has to be admitted that our knowledge of this subject is at the present moment extremely small.

Corrections

In his article entitled "A Purpuric Drug Eruption Caused by Carbromal" (March 12, p. 645), Dr. Peter Borrie mentioned that preparations containing carbromal are being fairly widely advertised to the public. In this connexion CLINICAL PRODUCTS LTD. write: "We wish to avoid any misunderstanding by pointing out that 'persomnia' public advertising was discontinued in June, 1950, and 'dormiprin' has never been advertised to the public."

In the last sentence of the first paragraph of Dr. H. S. Russell's letter (*Journal*, April 9, p. 909) on "Post-maturity and Asphyxia," "intact peritoneum" should have read "intact perineum."

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