Manganese in long term paediatric parenteral nutrition

EDITOR.—We strongly support the view of Reynolds et al that manganese should be measured routinely in all children on long term parenteral nutrition. We would suggest that manganese should also be monitored in patients with prolonged cholestasis who haven’t been on parental nutrition. We studied the whole blood manganese concentration and liver function tests in 10 patients with biliary atresia corrected by Kasai operation aged 8 months–17 years (mean 7·5 years). All patients were on normal diet and none had been on parenteral nutrition.

Hypermanganesaemia (>210 nmol/l) was detected in seven of the patients, six of whom had an alkaline phosphatase >1200 IU/l (150–1200 IU/l). In four of them the whole blood manganese concentration was potentially toxic (>360 nmol/l). No specific relationship was found between the blood manganese concentration and that of alanine transaminase and serum bilirubin. All the remaining three patients with normal blood manganese concentrations had normal alkaline phosphatase values. No obvious neurological effects were noted in any of the patients.

As none of these patients had received manganese supplements, these results suggest that the hypermanganesaemia is primarily caused by impaired manganese excretion.

The patients studied by Reynolds et al had cholestasis as well as being on long term parenteral nutrition. While we agree that it is essential to limit intravenous manganese intake in these children, our study suggests that this alone may be insufficient to prevent or reverse the hypermanganesaemia.

Further work is required to study the effect of chelating agents and/or agents promoting biliary excretion.

Management of anaphylactic reactions to food

EDITOR.—As immunologists involved in the provision of laboratory services for the investigation of allergic patients as well as patients with other immunological problems, we were concerned to read in Professor David’s clinical review of food induced anaphylaxis that some immunology laboratories ‘are routinely advising the use of adrenaline syringes for any child who is found to have food specific IgE antibodies (for example, positive RAST to peanut) regardless of the history’.

We wish to emphasise that clinical decisions such as that involved in the provision of preloaded adrenaline syringes must be made only on the basis of a full clinical assessment, preferably by a paediatrician, immunologist, or allergist involved in the diagnosis and management of patients with specific allergic disease. Interpretation of laboratory specific IgE (RAST) test results or skin prick tests, alone and in isolation is problematic as both false positive and false negative results can result from either type of investigation. It is our opinion that provision of direct clinical advice on the basis of laboratory results alone does not constitute good laboratory practice.