Correspondence

reduction, it is not clinically significant in our experimental conditions because the albumin-bilirubin binding capacity always remained greater than 5 mg/100 ml in any case. Further, the babies included in our study are being followed-up; and we have not so far seen any significant neurological damage in infants treated with bucolome.

In conclusion we think that the mechanism of action of bucolome is not clear and needs further investigation in vivo. Meanwhile we consider that bucolome should not be used therapeutically in newborn infants with high levels of serum bilirubin because of the possibility of reduction in albumin-bilirubin binding capacity and because its effect is slow. On the contrary, in the prophylaxis of hyperbilirubinaemia bucolome should be used only when there is careful control of the albumin-bilirubin binding capacity during treatment.

G. Segni, G. Polidori, and C. Romagnoli
Clinica Pediatrica, Universita Cattolica S. Cuore, Largo A. Gemelli 8, 00168 Rome, Italy.

References


Protracted diarrhoea in infancy

Sir,

We read with great interest the article by Larcher et al. (Archives, 1977, 52, 597) and would like to comment on several points. The authors included patients diagnosed as having secondary disaccharide intolerance in category 1, those with a specific diagnosis. Secondary disaccharide intolerance, as its name implies, is secondary to an insult which causes small intestinal mucosal damage with secondary disaccharidase deficiency. We think that this entity should be included in category 2 where no cause for the diarrhoea could be established.

In the past year we have treated 14 infants with a diagnosis of protracted diarrhoea in infancy. The diagnosis was made according to the criteria of Avery et al. (1968) with modification regarding the age of the patient. All had variable disaccharidase deficiencies, documented by specific enzyme assays done on jejunal biopsy material. We believe that if more patients in category 2 had had jejunal biopsies and disaccharidase activity determination, the number with secondary disaccharidase deficiencies (made apparent with appropriate tolerance tests) would be far greater than was found by Larcher et al.

The small intestinal biopsy is an important tool in diagnosis as well as in determining modes of treatment; namely, parenteral hyperalimentation versus some modification of an elemental diet (Branski, 1978).

D. Branski,
T. F. Hatch, and
E. Lebenthal
Division of Gastroenterology,
Department of Pediatrics,
Children's Hospital of Buffalo,
Buffalo, NY 14222, USA.

Dr Larcher and co-workers comment:

We welcome the letter of Drs Branski, Hatch, and Lebenthal. In the main they comment on two important issues. We agree, of course, that clinical intolerance to disaccharides may be a primary or secondary phenomenon, and that it can be related to a variety of pathophysiological events. We assumed that this would be evident to readers when categorising our patients.

Clinical intolerance to disaccharides is not synonymous with the in vitro activity of the substrate-specific enzyme activity assayed in intestinal biopsies obtained from the proximal small gut. Hydrolysis of ingested oligosaccharides is an extremely efficient physiological process, and clinical intolerance of ingested oligosaccharides will only occur when there is extensive reduction in the brush border membrane activity of disaccharidases. In clinical practice the important issue is whether ingested sugars provoke gastrointestinal symptoms, not what the activity of a particular enzyme is in an in vitro laboratory assay system. Our category 2 patients did not clinically respond to elimination of disaccharides from their diets. This does not necessarily imply that they were not intolerant to disaccharides, but does indicate that other pathophysiological factors were operating in the genesis of the protracted diarrhoea.

We also agree that small intestinal biopsy can be a very useful procedure in the diagnosis and management of protracted diarrhoea in infancy. It should be stressed, however, that a biopsy is not mandatory to the diagnosis and management of very sick infants with protracted diarrhoea, and that an empirical approach based on currently available knowledge is sometimes unavoidable. The procedure is not without risk in severely malnourished infants such as those reported in our publication. Unfortunately a detailed diagnostic work-up is not always...