

EFFECT OF ORAL LACTASE ENZYME ON THE DURATION OF CRYING IN
INFANTS WITH COLIC

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Elevated breath hydrogen (BH_2) excretion occurs in a significant proportion of infants with colic (Miller et al. 1987). This suggests a role for carbohydrate malabsorption in the aetiology of infantile colic. To test whether lowering the lactose intake of the colicky infant reduces the excessive crying characteristic of the condition, a double-blind cross-over trial of oral lactase enzyme or placebo was carried out.

Fifteen breast-fed infants were selected from a group of 51 infants, aged 3-9 weeks, admitted with their mothers to Tresillian Family Care Centre for mothercraft help. Inclusion criteria included: $BH_2 \geq 20$ ppm, duration of crying and fussing ≥ 3 h/day, crying and fussing not responsive to mothercraft skills, and no other cause for behaviour identified. Treatment was started 5 days after discharge from Tresillian and consisted of oral administration of yeast lactase (0.4g per dose; Go-Lact^R, Sharpe Laboratories) or placebo within 5 minutes of the start of each feed for 7 days. Infants were then crossed-over to the comparative treatment for another 7 days. During the last 48h of each treatment period the mothers recorded their infants behaviour using a validated parental diary (Barr et al. 1982). BH_2 excretion was measured in samples collected on the evening before each recording period.

Eleven infants (mean (SD) age, 6 (2) weeks) completed the study. The median (range) duration of crying and fussing whilst on lactase treatment was 3.4 (1.8-5.9) h/day and on placebo 3.0 (1.4-5.7) h/day (NS). Mean (SE) maximum BH_2 was 33 (6) ppm and 34 (6) ppm on lactase or placebo respectively (NS).

There was no evidence for an effect of oral yeast lactase on the duration of crying and fussing of colicky infants in this study. However, lactase treatment did not significantly alter BH_2 and therefore, presumably did not reduce the lactose load. An alternative explanation is that elevated BH_2 excretion in colicky infants is secondary to their behaviour or reflects the oligosaccharide load, endogenous carbohydrate secretion, monosaccharide malabsorption or bowel flora in these infants.

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