A multicenter, randomized, double-blind, placebo-controlled trial of the prokinetic agent erythromycin in the postoperative recovery of infants with gastroschisis.

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Abstract

BACKGROUND/PURPOSE:
The recovery of gut function after repair of gastroschisis is frequently prolonged, and these infants are prone to complications associated with parenteral nutrition. This trial was designed to investigate the effect of the prokinetic agent, erythromycin, on the attainment of full enteral feeding in infants after primary repair of uncomplicated gastroschisis.

METHODS:
A multicenter, randomized, double-blind, placebo-controlled trial was used to investigate the effect of enteral erythromycin (3 mg/kg/dose 4 times daily) compared with placebo on the attainment of full enteral feeding tolerance after primary repair of uncomplicated gastroschisis. Eleven neonatal surgical units in the United Kingdom participated in the study. The primary end-point was the time taken to achieve continuous enteral feeding at 150 mL/kg/24 hours sustained for 48 hours.

RESULTS:
Of 70 eligible infants, 62 were recruited and randomly divided. There were 30 patients in group I (placebo) and 32 in group II
(erythromycin). The groups were comparable in terms of mean gestational age, mean birth weight, extent of evisceration, and degree of intestinal peel. There was no statistically significant difference between the 2 groups in the time taken to achieve full enteral feeding (27.2 v 28.7 days; P =.75). Similarly, no significant differences were found in the incidence of catheter-related sepsis, duration of parenteral nutrition, or time to discharge between the 2 groups.

CONCLUSIONS:
Enterally administered erythromycin at a dose of 3 mg/kg 4 times daily conferred no advantage in the time taken to achieve full enteral feeding after primary repair of uncomplicated gastroschisis.