Randomized controlled trial of a high dose of oral erythromycin for the treatment of feeding intolerance in preterm infants.

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Abstract

OBJECTIVES:

To evaluate the effectiveness of high-dose erythromycin to treat feeding intolerance in preterm infants predominantly fed milk formula.

DESIGN:

This study is a prospective randomized controlled trial on 60 premature infants suffering from feeding intolerance. Thirty infants were given oral erythromycin ethylsuccinate at a dose of 50 mg/kg/day for 10 days or until they reached full enteral feeds. Randomization was stratified according to gestational age <32 weeks or ≥32 weeks gestation. The primary end point was the time taken to establish full enteral feeding since enrollment. Potential adverse effects associated with erythromycin were also monitored. Student's t test was used for comparison of continuous variables and $\chi(2)$for categorical data.

RESULTS:

In infants <32 weeks, the use of erythromycin was associated with more daily weight gain (12.8 ± 2.6 g vs. 9.2 ± 5.3 g, p = 0.04) compared to the control group. Time to reach full feed did not differ between the erythromycin (13.8 ± 3.9 days) and the control (17.46 ± 4.9 days) groups (p = 0.07). In infants ≥32 weeks, there were no differences between the erythromycin and the control groups.

CONCLUSION:

High-dose erythromycin is associated with greater weight gain in preterm infants <32 weeks gestational age, who are predominantly fed cow's milk-based protein formulas.

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