Effect of Erythromycin on Infantile Hypertrophic Pyloric Stenosis

Bhakta, Krusha (School: Joplin High School)

Infantile Hypertrophic Pyloric Stenosis (IHPS) is a condition that occurs in newborns from 0-6 months of age. Food is restricted from passing through the pylorus causing the obstruction of the gastrointestinal tract, ultimately leading to life-threatening symptoms such as severe dehydration and projectile vomiting. The etiology of the condition remains unknown. However, a possible cause is attributed to the commonly prescribed antibiotic erythromycin. This study was performed to see whether or not direct exposure to erythromycin can be linked to the thickening of the pylorus. A sample of fetal stomach and intestinal tissue was cultured and exposed to concentrations of erythromycin at 50 µg/ml, 100 µg/ml, and 300 µg/ml. The rate of cell proliferation was measured for each sample. Results showed, in all concentrations, that the erythromycin had no significant effect on cell growth.

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