

ABSTRACTS OF ORAL PRESENTATIONS – CASE STUDIES

OP07- Successful enteral nutrition in an infant with high-output ileostomy with short bowel-a case study

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Introduction and Objective

Infants with high-output ileostomies with short bowel should be managed expeditiously to maintain optimal growth and development. Thus, selection between enteral and parenteral nutritional interventions is challenging.

Clinical Presentation

A two-month-old infant with a high-output ileostomy and short bowel following surgical resection of distal ileum due to Hirschsprung's disease was referred for the management of failure-to-thrive. Her weight was 14.2% below birth weight. Her weight-for-age, weight-for-length was below -3SD and length/age between -1SD to -2SD (WHO standards). She was dehydrated and investigations revealed electrolyte imbalances with moderate anaemia.

Management

Infant's dehydration and electrolyte imbalances were corrected. Therapeutic feeding was initiated via nasogastric drip feeds to improve nutrient absorption. Energy delivery was gradually increased to provide 200 kcal/kg/day with expressed breast milk and a polymeric formula in addition to on-demand breastfeeds. Coconut oil was added to provide energy and medium chain triglycerides considering deficiency with bile salts. Hyper-osmolar feeds were avoided. Loperamide 50 micrograms/Kg was added to reduce the intestinal motility. Micronutrient supplements including oral zinc and iron with parenteral vitamin B12 were started. Stimulation was commenced. Ileostomy output reduced gradually and there was a steady weight gain of more than 10g/Kg/day. After 2 weeks of therapy, infant's weight-for-length improved (value between -3SD to -2SD) and frequent oral bolus feeds were initiated. At 4 months of age, energy-dense, rice-based, low fiber complementary feeds with semi-solid consistency were started. Hyper and hypo osmolar feeds were avoided. After 2 and half months of therapy, her weight-for-length reached above -2SD with age appropriate development.

Conclusion

Personalized enteral nutrition interventions together with pharmacotherapy was effective in correcting malnutrition in an infant with high output ileostomy with short bowel.

Keywords: High-output ileostomy infants, Enteral Nutrition, Malnutrition