

# Nutrition and Health 2018: Resolution of infantile intestinal pseudo-obstruction in a boy- G Angsten-Uppsala University

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## Abstract

Intestinal pseudo-obstruction in children is considered by bowel dilation, abdominal pain, and bowel failure, leading to opposite growth and advance. In most cases abdominal pseudo-obstruction is considered to be chronic condition (CIPO), and treatment is parenteral nutrition. The CIPO diagnosis is suspected to be incorrect in anecdotic cases of resolution. The intestinal morphology in pseudo-obstruction is under revision, and is currently descriptive and quantitative rather than diagnostic, but it is traditionally disconnected into neuropathies, myopathies, or combinations of them. The aim of this report is to present a well-documented case of resolving infant intestinal pseudo-obstruction.

**Patient:** The boy F.M. was born at period (40 weeks) after a normal pregnancy, birth weight 3450 g and birth length 50 cm. He stood the first child of a strong mother, and he was breastfed start with spontaneous passing of meconium within the first 36 h after birth. His first six weeks in life were normal, after which he developed progressive chapters of vomiting several times a day and abdominal swelling. He had pain and his stools were alternately hard or wet. A regime with a milk-free formula was tried for two months without any development of his symptoms. He was then referred as the section of pediatric surgery at our university hospital at five months of stage due to failure to prosper. A plain radiograph of the abdomen exposed massive bowel dilatation and a contrast enema suggested Hirschsprung's ailment with a transition zone located to sigmoid colon. However, the following rectal pressure biopsies confirmed presence of ganglion cells and absence of nerve hypertrophy. Exhibiting all signs of bowel obstruction, he was subjected to semi-emergent explorative laparotomy at 5 months of age.

**Histopathology:** Pathologist's report on the full width biopsies stated fibrosing myopathy, most pronounced in the slight bowel, interstitial Canal cell hypertrophy and hyperplasia, and signs of limited neuron degeneration in both the large and small bowel. There were more mast cells in the fibrosis between muscles films in the small bowel, but there were no signs of inflammation. The mucosa and submucosa were regular in all biopsies.

**Metabolic Balance:** At 1.5 years, a metabolic balance education was done because of poor growth. Among blood tests, concentrations of e.g. hemoglobin, platelets leukocytes, aspartate aminotransferase, albumin, bilirubin, sodium, potassium, creatinine, alkaline phosphatase and thyroid stimulating hormone and acid-base-balance, were measured. Urine and faeces were composed during three days for analysis of potassium, sodium, and chloride as well as fecal fatty acids and trace elements. The mother reserved a diary over his oral food intake, and the dietician calculates to intake of calories. The basal metabolic rate was measured in a Deltatrac device with a pediatric mixing respirometer. The boy's total energy intake and it loss per day and calculated lower and higher, respectively, compared to those expected at his age. The dietician improved his oral energy intake, and a new HPN was composed. The lipid emulsion was changed to a structured mixture of MCT/LCT supplemented with carnitine. The boy's oral intakes continue to be poor, but after 6 months he had grown 6 cm in height and increased 3 kg in weightiness.

**Management:** Patient was treated with oral ranitidine, 60 mg daily ursodeoxycholic acid, 50 mg 3 times daily and vein metronidazole (20 mg/kg) as a monthly bolus to reduce enteral bacterial overgrowth. Patient was vaccinated against pneumococci. biochemical and Haematological parameters were usual apart from constantly low leukocyte counts, which were further reduce by frequent episodes of viral infections and some bacterial septicaemias and a bone marrow surgery showed a slightly reactive marrow.

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