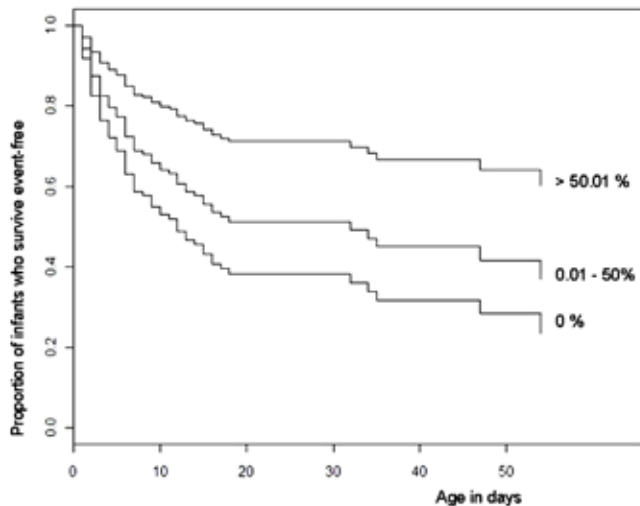


Abstract 227 Figure 1



Abstract 227 Figure 2

228 FACTORS ASSOCIATED WITH CONSTIPATION IN A PEDIATRIC INTENSIVE CARE UNIT

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¹J Lopez, ¹R Gonzalez, ²J Urbano, ¹MJ Solana, ²M Botran, ²A Garcia, ¹J Lopez-Herce. ¹Pediatric Intensive Care, Hospital General Universitario Gregorio Marañón. Instituto de Investigación Sanitaria Gregorio Marañón; ²Pediatric Intensive Care, Hospital General Universitario Gregorio Marañón, Madrid, Spain

Backgrounds and aims Constipation is a frequent complication in critically ill patients although there are few studies in children.

Methods Prospective observational study with children admitted in the PICU for more than 3 days. PRISM, PELOD and PIM2 scores, total number of days with mechanical ventilation, duration and doses of sedatives and inotropes, and nutritional aims were recorded. Correlations between these parameters and time to first defecation were analyzed.

Results 84 children (median 13 months-old) were included. Mean time to first defecation was 4 days (range 0–19). A positive correlation with PRISM (r:0.39), PELOD (r:0.33) and PIM2 (r:0.48) scores (p<0.01) was observed. Moderate correlation existed between the time to first defecation with the administration of vecuronium (r:0.40 p<0.01) and the days without enteral feeding (r: 0.46 p<0.01). There was a low correlation with days of mechanical

ventilation (r:0.3 p<0.01), treatment with fentanyl (r:0.23 p<0.05), remifentanyl (r:0.25 p<0.05), and absolute and proportional gastric residual volume (r:0.24 p<0.05 and r:0.3 p<0.01, respectively). A negative association with daily enteral feeding volume (r:-0.37 p<0.01) was observed. Treatment with epinephrine or norepinephrine was also associated with a delay in the first defecation (5.6 vs 2.8 days p<0.01).

Conclusions Mean time to first defecation in critically ill children is 4 days. Constipation in critically ill children seems to be associated with severity of illness. Enteral nutrition could help bowel motility.

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A RANDOMIZED PLACEBO CONTROLLED TRIAL OF BOVINE COLOSTRUM FED TO CHILDREN WITH SHORT BOWEL SYNDROME EVALUATED BY METABOLIC BALANCE STUDIES

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¹L Aunsholt, ²PB Jeppesen, ³N Qvist, ²P Lund, ⁴PT Sangild, ⁴T Thymann, ¹S Husby. ¹Department of Pediatrics, Hans Christian Andersen Childrens Hospital, Odense; ²Department of Medical Gastroenterology, Rigshospitalet, University Hospital of Copenhagen, Copenhagen; ³Department of Surgery, Odense University Hospital, Odense; ⁴Department of Human Nutrition, University of Copenhagen, Copenhagen, Denmark

Background and aims Parenteral support is indicated in short bowel syndrome (SBS) patients with intestinal failure to avoid metabolic imbalance, electrolyte and nutrient deficiencies, and to maintain adequate growth and function. Length, function and adaptation of residual bowel, promoted by e.g. luminal stimulation by nutrients determine the subsequent form of therapy. Colostrum contains putative stimulatory factors why, we hypothesise that supplementation could promote adaptation in children with SBS. Intestinal absorption of energy and wet weight was used to assess efficacy of colostrum and to define intestinal failure.

Methods and materials Nine children with SBS were included in a double-blinded randomised cross-over trial. Twenty percent of their enteral nutrition was replaced with bovine colostrum and a milk-mixture for 4 weeks, separated by a 4 week wash-out period. Between baseline and end of study, children were clinical and biological assessed 4 times.

Results Four HPN-patients had mean energy absorption of basal metabolic rate (BMR) of 81% and wet weight absorption of basal fluid need (BFN) of 6% at baseline compared to 5 non-HPN-patients with mean energy absorption of BMR of 196% and wet weight absorption of BFN at 76%, p=0.02, p=0.05. Colostrum did not improve energy or wet weight absorption compared to milk-mix, p=0.85, p=0.59. Urea increased during colostrum supplementation, p=0.04.

Conclusion The degree of intestinal function and a distinction between intestinal insufficiency and failure can successfully be assessed by energy and wet weight balance studies. Bovine colostrum did not promote intestinal adaptation.

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HYPOPHOSPHATEMIA: A RISK FACTOR FOR INSULIN REQUIREMENT IN ELBW INFANTS?

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¹L Dreyfus, ^{1,2}CJ Fischer, ^{3,4,5}D Maucourt-Boulch, ^{1,6}M Essomo Megnier Mbo Owono, ¹S Laborie, ^{1,7}O Claris. ¹Department of Neonatology, Hôpital Femme Mère Enfant Hospices Civils de Lyon, Bron, France; ²Department of Neonatology, Centre Hospitalier Universitaire Vaudois et Université de Lausanne, Lausanne, Switzerland; ³Department of Biostatistics, Hospices Civils de Lyon, Lyon; ⁴CNRS UMR 5558. Equipe Biostatistique-Santé, Laboratoire de Biométrie et Biologie Evolutive; ⁵Université Claude Bernard Lyon 1, Villeurbanne, France; ⁶Department of Neonatology, Centre Hospitalier de Libreville, Libreville, Gabon; ⁷EAM 4128, Université Claude Bernard Lyon 1, Villeurbanne, France