embolization procedure celiac arteriography revealed only partial occlusion of APF due to diffuse involvement (Figure 2).

Discussion

Our case is unique as it is the first case attempted to be treated with percutaneous transvascular coil embolization of the APF. Hepatic angiography is the gold standard to confirm the diagnosis and to demonstrate the vascular anatomy (5).

REFERENCES


PO-0607 ADVISING MILK DONATION TO A HOSPITAL MILK BANK. QUALITY ANALYSIS

L Zamorano Bonilla, L Serrano López, M Peña Caballero, V Jiménez Cabanillas, E Martín Álvarez, E Martín Álvarez, JA Hurtado Suazo. Pediatric, Hospital Universitario Virgen de Las Nieves, Granada, Spain

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Introduction

Increasing needs of human donor milk in the Neonatal Units have aroused the interest to develop attention points for donors in hospital where the Milk Bank is not present.

Objectives

To analyse the activity of the external points for donors attention of the Hospital "Virgen de las Nieves" Milk Bank. Assessment of quality of the process of these points.

Methods

Staff members from these centres were trained, visiting the Milk Bank and with written protocol. A transfer system was established with refrigerators and temperature records along the process. The hospital milk bank is responsible for ensuring the traceability of the process. Several variables were analysed and compared: acidity, microbiological culture and volume of pasteurised milk rejected during 2013.

Results

Two points of attention for milk donors have been operating regularly since 2012. Total number of donors was 43 and 158 litres of donor milk were collected. Analysing the percentage of rejected milk according to its origin: 4% the volume received in the bank was not processed, 12% point 2 and 8% point 1 were discarded. This difference lead us to the revision of the storage system, transportation and adequate information for hygiene during milk collection.

Results in Table 1 and 2.
THE BENEFIT OF COMPUTER ASSISTED PRESCRIPTION OF PARENTERAL NUTRITION IN ELGANs

O Olutoye, A Pogorelc Erjavec, M Miramos, J Donator. Department of Gynecology and Obstetrics, University Medical Centre, Ljubljana, Slovenia; 2Children Hospital, University Medical Centre, Ljubljana, Slovenia; 3Faculty of Computer Science and Informatics Ljubljana, University Ljubljana, Ljubljana, Slovenia

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Background To minimise extrauterine growth restriction in ELGANs computer assisted prescription of parenteral nutrition (CAPPN) was introduced.

Aim To evaluate the effectiveness of CAPPN in growth improvement of ELGANs.

Patients and methods In this retrospective, observational designed study with a nonprobability, convenience sampling to obtain medical records, we compared 20 ELGANs in the study group after CAPPN to 20 ELGANs in the control group before CAPPN. Daily parenteral and enteral intake of macronutrients, calcium and phosphate in five sequential time intervals of the first 28 days of life was calculated (day 1–3, 4–7, 2nd, 3rd, 4th week). Outcome measures were the length of PN, days to regain birth weight (BW), growth velocity, and weight and head circumference (HC) >10th percentile on day 28. Numerical data were analysed by independent-samples t-test or by Mann-Whitney U test, categorical data were analysed by chi-square.

Results The combined enteral and parenteral intake of the study group in all five sequential intervals after birth exceeded the intake of the control group. The length of PN and days to regain BW did not differ, however growth velocity (14.5 [3.7] vs 11.6 [0.4] g/day (p = 0.03)) and HG velocity (0.9 [0.3] vs 0.7 [0.4] cm/day (p = 0.03)) were higher in the study group. Less growth retardation on day 28 was obtained (weight 2/20 vs 9/20 (p < 0.001); HC 3/20 vs 13/20 (p < 0.001)).

Conclusion In ELGANs delivery of nutrients and growth during the first month of life were significantly improved with CAPPN.

Metabolomic determinants of necrotising enterocolitis in preterm piglets

L Call, B Stol, S Garcia, C Bauchart-Thevet, J Donnelly, F Shekh, A Akinikustu, D Olutoye, A Wittle, D Burin. Pediatrics, Children’s Nutrition Research Center/ Baylor College of Medicine, Houston, USA; 2Surgeon, Texas Children’s Hospital Division of Pediatric Surgery, Houston, USA; 3Nutrition, Maud Johnson Pediatric Nutrition Institute, Houston, USA

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Background and aim Studies in premature infants and animals show that carbohydrate malabsorption and gut microbiota colonisation are key elements for triggering necrotizing enterocolitis (NEC). Our aim was to determine how dietary carbohydrate composition affects the metabolomic profile and whether unique metabolite signatures correlate with NEC incidence.

Methods Cecal contents and plasma were collected from a group of preterm pigs at birth and from three groups fed formula containing either lactose, corn syrup solids (CSS) or a 1:1 mixture of lactose:CSS (MIX) as the sole carbohydrate. We performed metabolomic analysis by LC/GC mass spectroscopy, clinical and histological NEC scoring, and distal ileum tissue expression of inflammatory markers.

Results Based on clinical and histological scores NEC incidence rates were 12%, 35%, and 40% in the lactose, CSS and MIX groups, respectively. Ileum inflammatory markers (IL-8, IL-6, and IL-1b) were highest in CSS vs. MIX and lactose groups and also correlated with NEC. Metabolomic analysis showed that lactose vs. CSS formula increased abundance of several cecal endocannabinoids. CSS and MIX formula increased plasma histamine, cecal and plasma lactate, beta-hydroxybutyrate, and butyrate, and decreased the abundance of several primary and secondary bile acids vs. lactose fed pigs.

Conclusions We conclude that lactose-based formula protects against inflammation and NEC and that this correlates with increased cecal levels of anti-inflammatory neurotransmitters and reduced levels of carbohydrate fermentation products and bile acids. This novel finding suggests that endocannabinoids, normally found in breast milk, may be produced endogenously and modulate inflammation in preterm neonates fed a lactose-based formula.