Abstract

Parenteral nutrition (PN) has become a mainstay in the treatment of critically ill children, and in the management of extremely premature newborns. We analyse the changes in the profile of pediatric PN in our institution during the last decade. Method: The clinical record of all patients under 16 who received PN in 1994 and 2002 were reviewed. Epidemiological data as well as composition of the solutions were recorded. Student t test and Chi-square were used for comparisons as appropriate. p value < 0.05 was considered as statistically significant. Results: 194 patients received PN in 1994 (123 neonates and 71 children); 186 in 2002 (112 neonates and 74 children). The percentage of inpatients who received PN was 10.7% in 1994 vs 3.7% in 2002 in neonates; 1% in 1994 vs 1.3% in 2002, in infants and children. Gastrointestinal surgery in infants and children and extreme prematurity in newborns were the most frequent indication. All neonates received tailored PN solutions while it was standardised in almost 60% of children. Internal jugular vein in children and peripherally inserted central venous catheters in neonates were the most usual vascular access. Length of PN was 10 ± 8.7 days in 1994 vs 9.2 ± 8.2 in 2002 in neonates; 15.2 ± 14.8 days in 1994 vs 11.0 ± 14.9 in 2002 in infants and children. 21% of the children presented at least one complication due to PN. Conclusions: There have been very few changes in the use as well as in the profile of the PN practise during the last decade. Gastrointestinal surgery and prematurity were the most frequent indications.

Keywords

Parenteral nutrition, children, neonates, nutrition support, liver dysfunction, catheter.