

PARENTERAL NUTRITION-ASSOCIATED CHOLESTASIS AS AN EARLY-ONSET ADVERSE EFFECT IN ADULT PATIENTS

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OBJECTIVES

- ✓ Parenteral nutrition associated cholestasis (PNAC) is a condition of impaired secretion of bile or frank biliary obstruction that may occur in 25-100% of adult patients receiving long-term parenteral nutrition (PN).
- ✓ Objective: to analyze the onset of PNAC in hospitalized adult patients and the possible risk factor associated.

MATERIALS and METHODS

Observational, retrospective and longitudinal → January-2017 to September-2018



Inclusion criteria

- ✓ Adult patients
- ✓ PN for at least 5 days
- ✓ Before starting PN, patients should have normal serum level of:
 - Alkaline phosphatase (AP)
 - Gamma-glutamyl transpeptidase (GGT)
 - Total bilirubin

Cholestasis definition

- GGT>106.6U/L or
- Total bilirubin >1.8mg/dl or
- AP(193.5U/L)+(GGT or bilirubin)

Primay endpoint:
Time to the onset of cholestasis

Variable collected

- ✓ Gender
 - ✓ Age
 - ✓ Sepsis
 - ✓ Cyclic PN infusión
 - ✓ Kcal/kg
 - ✓ Balance dextrose/fat
 - ✓ Fat > 1g/kg/d
- At initiation of PN
- At onset of cholestasis or at the end of PN treatment

RESULTS

156 patients

48.7% developed cholestasis within a median of 6 (IQR=4) days

	With cholestasis	Without cholestasis
% males	60.0%	72.4%
Median age	69.5 (IQR=18.3)	69 (IQR=15.3)
% sepsis	6.6%	13.7%
% cyclic PN infusion	27.6%	60.0%
Median Kcal/kg	23.9 (IQR=6.5)	24.9 (IQR=7.6)
Median balance dextrosa/fat (g/g)	4 (IQR=0.7)	3.6 (IQR=0.7)

Statistical significant differences were only obtained for males ($p<0.05$) and for cyclic PN ($p<0.01$).

CONCLUSIONS

- ✓ PNAC is an adverse effect that not only happens in patients receiving long-term-PN, but also occurs in a high percentage of hospitalized adult patients receiving PN over the first week.
- ✓ In addition, males are associated with an increased likelihood for development PNAC while cyclic PN infusion may be a protector factor for its onset.

