IMPACT OF PHARMACEUTICAL INTERVENTIONS IN PARENTERAL NUTRITION

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Background
The role of pharmacists on parenteral nutrition (PN) management differs between hospitals. In our case, pharmacists aren’t limited to PN compounding and distribution. For more than 20 years, pharmacists have been supporting the calculation of patients’ basal metabolism (PBM) and developed protocols for a gradual introduction of PN in order to avoid refeeding syndrome (RS).

Purpose
To evaluate pharmaceutical interventions (PI) in PN, its acceptance and impact.

Materials
Prospective study including patients on PN, March to September 2018. Data were collected through communication with nurses/physicians or from electronic records. Prescriptions were daily electronically validated. PBM was calculated by Harris-Benedict formula. All interventions and relevant clinical data were recorded and analyzed.

Results
The study included 69 patients
65.5 ± 16.6 years
68.1% female, 31.9%

66 Pharmaceutical Interventions in 126 PN prescriptions (52.3%)
Acceptance rate 90.2%

- PBM and rate infusion calculation
- Suggestions for special protocols due to the high risk of RS
- Prescribed bag adjustments
- Alerts to physician NP electronic prescription discontinuation
- Electrolytic imbalances corrections
- Scheduling of NP suspension days
- Hydric imbalances adjustments
- Correction of prescribed lipid supplements

Conclusion
Pharmacists are key elements with a recognized value of theirs interventions (90.2% acceptance rate) which improve the adequacy and safety of PN concerning metabolic and catheter-related complications.

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