

PHARMACEUTICAL INTERVENTIONS IN THE MANAGEMENT OF PARENTERAL NUTRITION IN CRITICALLY ILL PATIENTS

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Background

Currently the functions of the clinical pharmacist in relation to parenteral nutrition (PN) are based on the preparation of these formulas and checking that the composition is adapted to the nutritional requirements and the clinical situation of the patient. The pharmacist can collaborate with the Intensive Care Unit (ICU) physicians in the optimization of nutritional support in critical patients.

Purpose

Description and analysis of pharmaceutical interventions (PIs) concerning PN in critical patients and the establishment of the degree of acceptance by physicians who belong to Intensive Care Unit (ICU) in a tertiary hospital.

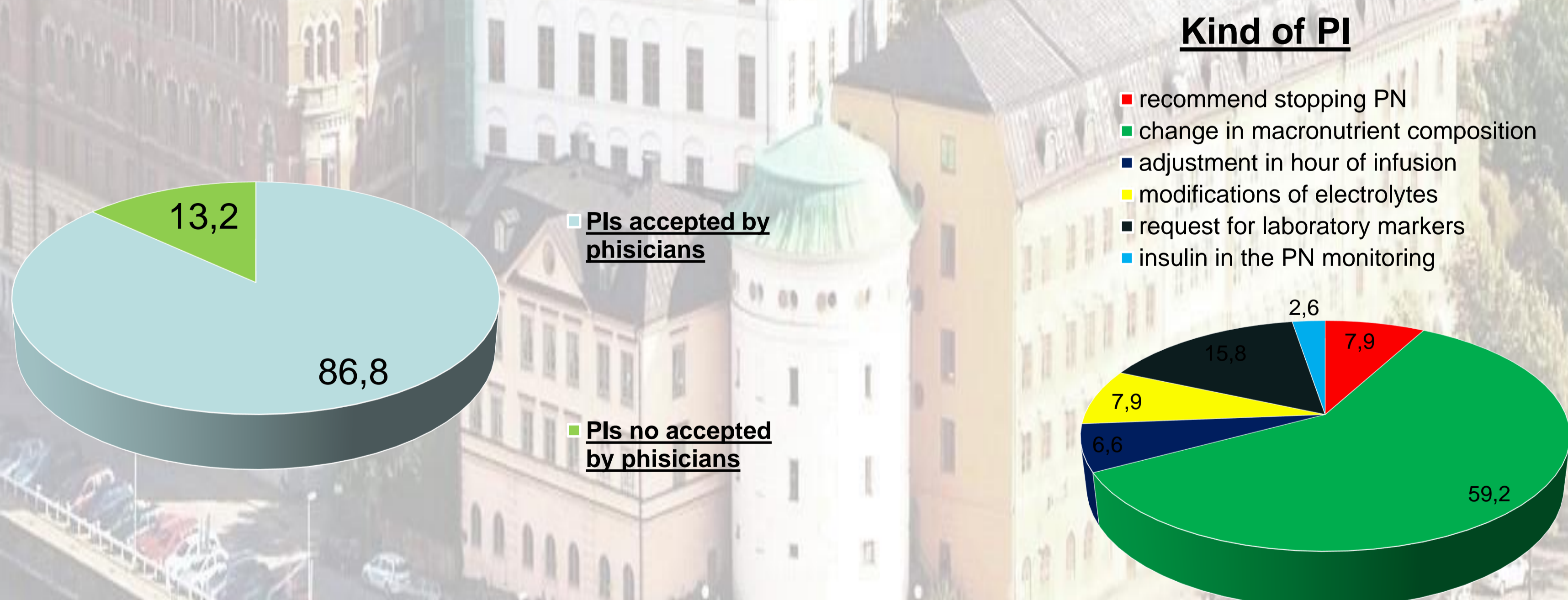
Material and methods

A prospective study was conducted (July-September 2017). Variables included: demographics, indication of PN, type of PI. Data were obtained from medical and pharmaceutical nutrition records.

Results

451 PN prescriptions were recorded for 33 patients (30% were women; mean age was 61, range 19-70). The average duration of treatment with PN was 18 days (1-44). 76 interventions were recorded (2.3 PIs/patient). 5.3% were made at the beginning of the prescription, 92.1% were follow-up interventions and 2.6% were made at the end of the PN therapy.

Distribution of PIs according to indication: postoperative complications (36.8%); colorectal surgery (18.4%); upper gastrointestinal tract surgery (17.1%); pancreatitis (13.2%); critically ill patients with a contraindication to enteral feeding (13.2%) and liver diseases (1.3%).



Conclusion

More than two PIs were performed per patient, mostly during the treatment follow-up and in patients with heterogeneous indications of PN. Most of the PIs were due to the need of adjusting the composition of the macronutrients to the nutritional requirements and the patient's clinical situation. The acceptance rate of PIs was highly significant which demonstrates that ICU physicians take into account these recommendations.