STUDY OF GLUTAMINE USE IN ADULT PARENTERAL NUTRITION

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BACKGROUND

Intravenous glutamine supplementation in patients with catabolic stress is widespread in clinical practice, although there is no clear consensus on its use.

PURPOSE

Study the use of glutamine in parenteral nutrition of adults to adapt it to the available scientific evidence and assess the economic impact of parenteral nutritional therapy.

METHODS

Retrospective observational study of parenteral nutrient units (PNU) produced during 2011.

Three most representative services:
Digestive Surgery, Digestive and Intensive Care Unit (ICU).

Data collection source: Software in nutrition parenteral area. Pharmacy Management System.

Study Variables:
• Produced protocols by service (PNU number of each protocol, protocol type, number of patients with each protocol and duration of nutrition).
• Individualized nutritions produced by service (PNU number, number of patients and duration of nutrition).
• Cost of each protocol and glutamine cost therein.

RESULTS

Of all adult PNU protocolized produced, 58% were stress protocols.
PNU per service (including individual):
• Digestive Surgery: 80% are stress PNU of the total number of PNU and correspond to 68% of the patients, there is available scientific evidence to recommend the use of glutamine in patients undergoing major abdominal surgery.
• Digestive: 52% are stress PNU of the total number of PNU and correspond to 54% of the patients, associated with its use in acute pancreatitis and inflammatory disease, although clinical studies are insufficient to recommend.
• ICU: 63% are stress PNU of the total number of PNU and correspond to 72% of patients, since there is evidence of clinical benefit with high recommendation.

Glutamine cost in a PNU varies between 45.4% - 55.7% of the total cost of nutrition.
Total cost of PNU protocolized 76.5% corresponds to stress protocols.

CONCLUSIONS

An opportunity for improvement is identified in the use of glutamine. We propose a detailed study prescription / indication to rationalize the high use and associated costs of it.

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