

CAUSES OF INTERRUPTION OF ENTERAL NUTRITIONAL THERAPY IN CRITICAL PATIENTS: A LITERATURE REVIEW

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Abstract: Enteral nutritional therapy (ENT) is indicated when the patient is at risk of malnutrition, that is, when oral intake is insufficient and is still contraindicated in cases where the gastrointestinal tract is not intact or functioning. Early administration of ENT, even when indicated, is not free from inconveniences such as mechanical, gastrointestinal, metabolic, respiratory, infectious and psychological complications, situations that can lead to interruption of ENT. To optimize the administration of enteral nutrition (EN), the knowledge and control of these complications related to ENT, by the multidisciplinary team, are essential for the early resolution of the factors that negatively interfere in the adequate supply of nutrients. The aim of the study was to describe the main causes of ENT interruption in critically ill patients through a literature review. A systematic bibliographic review study was carried out, of the exploratory type with a bibliographic approach with analysis and discussion. Throughout the work, it was possible to recognize the main causes of interruption of ENT and that these must not be disregarded by the multidisciplinary team.

Keywords: Enteral nutrition; Critical care; adverse events.

INTRODUCTION

The nutritional status of hospitalized patients directly interferes with the improvement of their clinical condition, being extremely important during treatment and hospitalization. Critically ill patients admitted to an Intensive Care Unit (ICU) usually do not have adequate oral food intake, requiring nutritional support, since nutritional status is crucial for favorable outcomes, mainly in patients with exacerbated catabolism (TOLEDO; CASTRO, 2015).

The early offer of ENT, when indicated, is associated with benefits such as reduction of infectious complications and shorter ICU stay, many patients still receive inadequate nutritional supply due to myths related to conduct (TOLEDO; CASTRO, 2015).

Malnutrition in critically ill patients is the result of all metabolic and inflammatory changes caused by the underlying disease, and is often unavoidable. Nutritional therapy is not intended to repair nutritional changes in critically ill patients, since loss of lean body mass is inevitable and evolves gradually, regardless of previous nutritional status. The main purpose of ENT is to preserve a sufficient, adequate supply of nutrients in the appropriate period and concomitant with the patient's recovery (TOLEDO; CASTRO, 2015).

For Waitzberg (2009) and Toledo and Castro (2015) ENT is recommended for those who cannot or cannot, due to their clinical condition, provide their energy needs through oral feeding, however, it is not free from inconveniences, such as, for example, mechanical, gastrointestinal and metabolic complications. Cuppari (2005) also points out respiratory, infectious and psychological complications, situations that can lead to interruption of ENT.

Complications associated with ENT must not be disregarded and the multidisciplinary team needs to be attentive to prevent risks of complications and promote quality in the service provided (TOLEDO; CASTRO, 2015).

Fujino and Nogueira (2007) associate the low caloric intake with ENT complications such as: reflux, medical and nursing procedures, diarrhea, abdominal distension, adversities with the nasoenteral tube (ENS), nausea and vomiting, which interfere with the infusion of the diet in critical patients

The main purpose of ENT is to preserve the supply of sufficient nutrients, in the

appropriate period and concomitant with the patient's recovery, but many patients still receive an insufficient nutritional supply due to complications related to ENT (TOLEDO; CASTRO, 2015).

GOAL

To describe the main causes of interruption of ENT in critically ill patients.

METHODS

A systematic bibliographic review study was carried out, of the exploratory type, with a bibliographic approach with analysis and discussion, which, according to Diehl et al. (2004) and Volpato et al. (2013) consists of synthesizing scientific evidence on a given subject.

Initially, the research was carried out by searching for material on the subject, in specific books in the area of nutrition, magazines, periodicals, theses and electronic databases (Bireme, Lilacs, Scielo and Medline). The keywords for the search in scientific articles were: enteral nutrition, critical care, nutritional therapy, intensive care unit and adverse event.

The period corresponding to this search was restricted to the last 8 years, giving preference to articles in English and Portuguese, excluding publications prior to the year 2009.

DISCUSSION

Enteral nutritional support can be impaired due to several conditions that interfere with the planned nutritional therapy, causing its temporary or permanent suspension, which contributes to the decline of the patient's nutritional status. The main conditions that lead to the interruption of ENT are: gastrointestinal dysfunction (emesis, diarrhea, abdominal distension, gastroparesis), fasting for procedures and

exams, loss of enteral access and clinical instability of the patient (SANTANA et al., 2016).

Nunes et al. (2018) evaluated 48 patients admitted to the Intensive Care Center (ICU) and found that the most frequent causes of enteral diet suspension were: fasting (31.33%), diarrhea (20.8%) and emesis (16.7%). These results corroborate the study by Santana et al. (2016), carried out with 38 patients, in an ICU of a university hospital, where it was identified that in 60.53% of patients the enteral diet infusion was interrupted due to fasting for procedures, followed by diarrhea (28.95%), emesis (18.42%) and abdominal distension (15.79%).

A similar result was found in the study by Isidro and Lima (2012), with fasting for procedures being the biggest reason for suspension of the enteral diet (84.6%), followed by nausea/emesis (38.5%). In addition to diarrhea and vomiting, gastroparesis is another gastrointestinal complication associated with the use of ENT. For Toledo and Castro (2015) this symptom is the most frequent related to EN interruption or decrease in enteral diet infusion.

In 2009, a retrospective survey of the ENT evolution protocol of 59 patients found that the volume of EN infused was less than the volume of the prescribed diet. According to nursing, the main causes for EN interruption were reflux, diarrhea, gastric residue, abdominal distension and pulmonary aspiration (DETREGIANCHI et al., 2011). The most frequent causes of enteral diet interruption reported in the medical records of patients admitted to the ICU were: diagnostic procedures (41.6%), nausea and emesis (15.2%), abdominal distension (14.4%), complications clinics (14.4%), constipation (8.8%) and transition to oral feeding (5.6%) (ASSIS et al., 2010). The

infusion of a volume below the prescribed enteral diet in critically ill patients contributes to malnutrition and its complications such as: increased morbidity and mortality, the incidence of infection, length of stay and hospital costs (ASSIS et al., 2010).

CONCLUSION

To optimize the infusion/administration of ENT, knowledge and control of these complications by the multidisciplinary team are essential for the early resolution of factors that negatively interfere in the adequate supply of nutrients.

For these reasons, it is important that the monitoring of ENT in critically ill patients is carried out daily using validated protocols, appropriate to the practice of the place, with the team trained to follow the protocols and carry out records in medical records in order to ensure a positive outcome regarding the evolution of nutritional therapy, minimizing ENT interruptions.

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