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EfCCNa Position Statement

Nurses Responsibilities on Providing Enteral Nutrition to the Critically Ill Patient



European federation of Critical Care Nursing associations – EfCCNa

Contents

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Introduction

In ICU, one of the nurse's roles is to ensure proper nutrition support to facilitate their recovery. However, few nutrition protocols for nurses are found.
The European federation of Critical Care Nursing associations (EfCCNa) position statement provides ICU nurses with evidenced guidelines regarding caring critically ill patients with enteral nutrition support.

Background

Nutritional status impacts wound healing, ventilator weaning, organ function, mobility and mortality (Cederholm, 2017). Tian et al (2018) performed a meta-analysis of randomized controlled trials and demonstrated that better outcomes occurred when patients who were unable to eat received nutrition support within 24 to 48 hours of ICU admission. Therefore, it is essential that nurses understand nutrition assessment and application, monitor and manage severely ill patient's nutrition. In ICU, one of the nurse's roles is to provide proper nutrition to ensure support of severely ill patients' organ systems. In nourishing critically ill patients, nurses have an important role in identifying those at risk of inadequate feeding, malnutrition and preventing complications of enteral nutrition (McClave et al., 2016; Dhaliwal et al., 2014).

Statement

This EfCCNa position paper provides a protocol for nurse to care critically ill patients with enteral nutrition. In this position statement, critically ill patient is defined as those with complex health situations, at high risk for insufficient nutrition, and in the need of an individual approach; enteral nutrition is defined as the application of nutritional supplements via oro/naso gastral tubes or devices placed into gastro-intestinal area. Nurses must assure that patient's nutrition administration starts within 24-48h after admission to ICU (McClave at al., 2016). Then, they should assess the nutritional status and feeding tube efficacy of patients, implement and monitor enteral nutrition, and then evaluate the outcomes of enteral nutrition. Figure 1 illustrates the protocol of care for critically ill patients with enteral nutrition.

1. Assessment

I. Nutritional Status

There are a number of tools that can be used for daily assessing the nutritional status, such as:

- Nutrition risk screening (NRS) (Kondrup et al 2003)
- The Nutrition Risk in the Critically Ill (NUTRIC) score assessing both nutritional status and disease severity (Heyland et al., 2011; Kondrup et al., 2002)
- Malnutrition Risk Score (Ferguson et al, 1999)
- Subjective Global Assessment (for surgical or trauma patients) and the Body Mass Index (BMI, with a BMI < 18 indicating severe malnutrition and a high risk of re-feeding syndrome while nutrition support) (Cederholm et al., 2017)

II. Feeding Tube

- Daily assessment of the feeding tube (according to the hospital standards) to ensure its correct placement
- Assuring oral/nasal hygiene and care

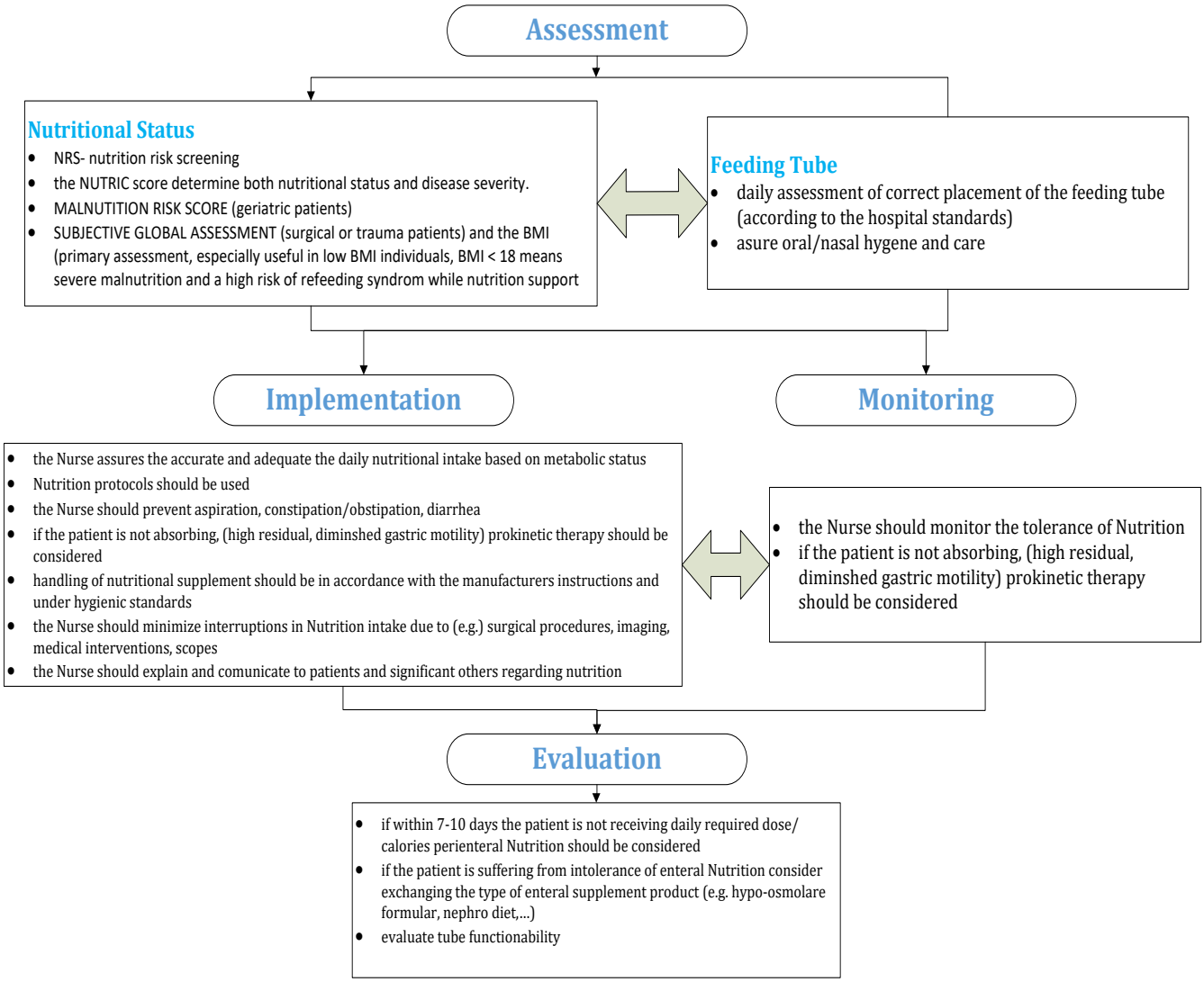

Fig. 1: Protocol of care for critically ill patients with enteral nutrition

2. **Implementation and monitoring (enteral nutrition**)

- Assuring the accurate and adequate the daily nutritional intake based on metabolic status
- Nutrition protocols should be used (*Makic et al. 2011; Kreymann 2010)*
- Monitoring the tolerance of nutrition (*Nguyen, 2014)*
- Preventing aspiration, constipation, and diarrhea (Blaser et al., 2017)

- If the patient is not absorbing leading to food residue and diminished gastric motility, then prokinetic therapy should be considered (Montejo et al., 2010; Knowles, et al., 2014)
- Nutritional supplement should be taken in accordance with the manufacturer's instructions and under hygienic standards (*National Clinical Guideline Centre, 2012*)
- Minimizing interruptions in nutrition intake due to surgical procedures, imaging, medical interventions, scopes etc.
- Explaining and communicating to patients and significant others regarding nutritional support (Doenges et al 2013)

3. Evaluation

- If the patient is not receiving daily required dose/calories within 7-10 days after ICU admission, parenteral nutrition should be considered (McClave et al., 2016)
- If the patient is suffering from intolerance of enteral nutrition, nurse can recommend considering exchanging the type of enteral supplement product (e.g. hypo-osmolare formula, nephro diet, etc) (McClave et al., 2016; Singer et al., 2011)
- Evaluating tube functionality [*Ministry of Health Singapore (MOH), 2010*]

Conclusion

The EfCCNa position stated above provides an overview concerning the key role of nurses in enteral nutrition for critically ill patient. The position statement is underpinned with evidence based guidelines and sources from leading experts in behalf of nourishing critically ill patients such as ESPEN (European Society of Parenteral and Enteral Nutrition), ASPEN (American Society of Parenteral and Enteral Nutrition) and ESICM (European Society of Intensive Medicine).

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