Dysphagia in Intensive Care Units (ICU)Patients

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Introduction

Dysphagia is defined as a difficulty to swallow, up to an inability to swallow food, liquids, and pills from mouth to stomach. Swallowing disorders have been increasingly recognized as an emerging concern by health care professionals, especially those treating senior patients[1-3], and critical care practitioners should search diagnostic strategies to understand the mechanisms and avoid the complications of ICU-acquired swallowing disorders, such as aspiration, reintubation, pneumonia and a prolonged hospital stay, because they can be devastating.

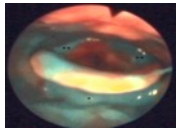
Objectives

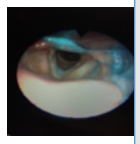
This study aimed to determine the presence of dysphagia, and physical findings of swallowing disorders through functional endoscopic evaluation of swallowing (FEES) within a population of patients hospitalized in the ICU; with different comorbidities that could interfere with the presence of dysphagia. Also analyzed were the following parameters: the presence of alternative nutritional support, the clinical diagnosis of pneumonia, the presence of tracheostomy and speech therapy.

Method

Retrospective review of medical records of patients Samaritano Hospital S. Paulo,Brazil 2009 to 2015

- ✓ Clinical diagnosis of oropharyngeal dysphagia with risk of bronchoaspiration (88 patients)
- ✓ **FEES**
  1. Food residue
  2. Laryngeal penetration
  3. Aspiration
  4. Sensitivity



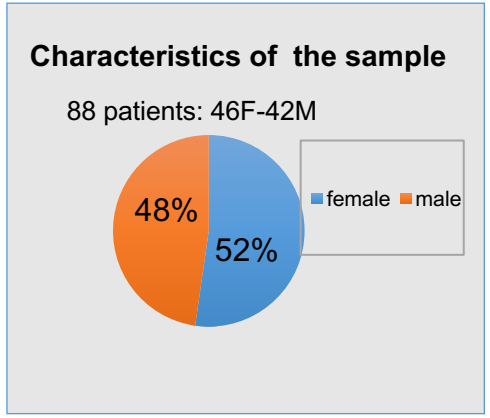


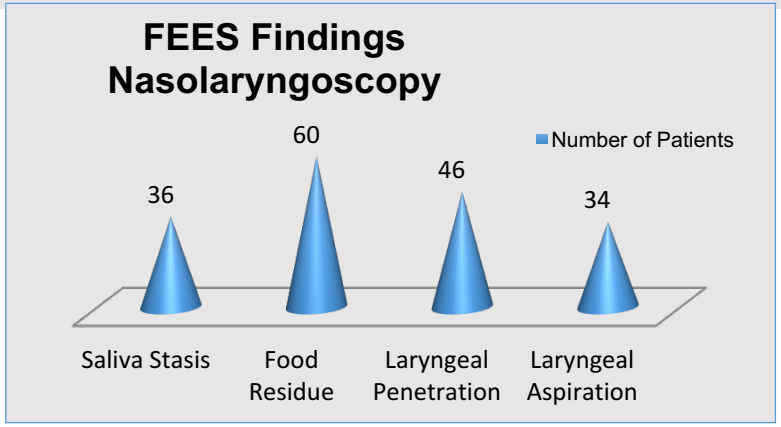
Langmore, Schatz & Olsen (1988), Rosenbek et al (1996)

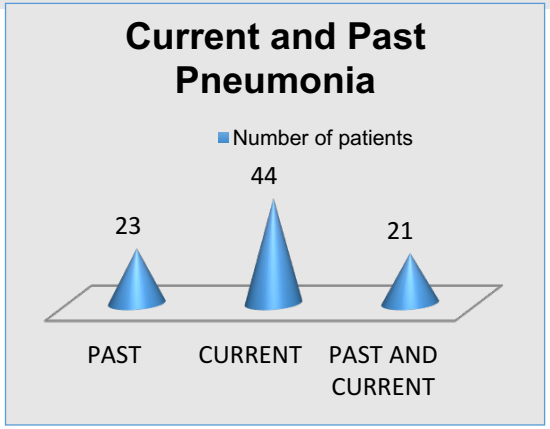
- ✓ **Other Parameters**
  1. Presence of alternative nutritional support
  2. Clinical diagnosis of pneumonia
  3. Presence of tracheostomy
  4. Speech therapy

Results

Out of all, five patients did not have indication for evaluation of swallowing, 10 patients showed suggestive signs of oral and/or oropharyngeal dysphagia(stasis, penetration and/or aspiration of saliva), and one septic patient with nasoenteral tube (NET) and tracheostomy was not evaluated with FEES because the exam would not modify the disease course at that time, while another family did not authorize the evaluation

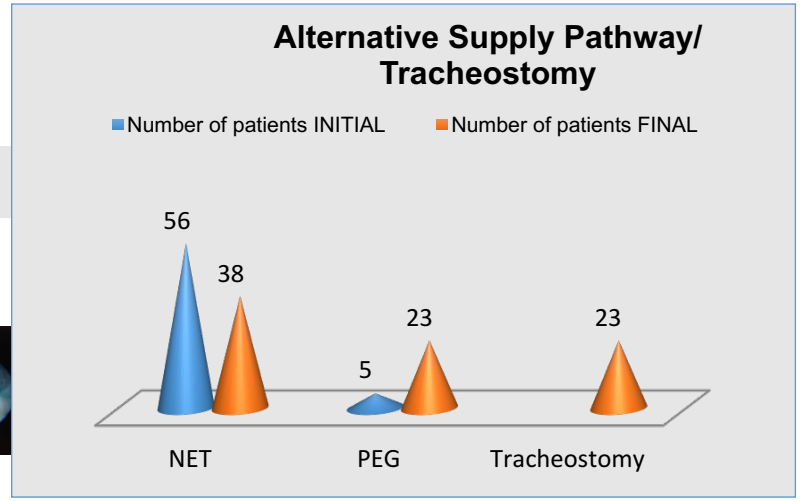






Current pneumonia in 65 (39,63%) and past pneumonia in 44 (26,82%).

Seventy-one patients: pharyngeal saliva stasis in 28/71 (39.43%), food residue in 60/71(83.3%), penetration in 40/71(56.33%) (4) laryngeal-tracheal aspiration in 28/71 patients (39.43%), (5) laryngeal sensitivity present in 32 patients (45%), 19 absent (26.7%), and 20 not tested (28.1%).



Speech therapy was applied in 84 (95.45%) patients, 75 patients (100%) with dysphagia, 11/13 pts without dysphagia
To aid in the re-introduction of safe oral feeding , also with decannulation

Discussion

The critically ill patient is a patient at risk for dysphagia due to alterations in the sensitivity of the secondary airway to prolonged orotracheal intubation, presence of tracheostomy cannula, presence of nasoenteral catheter, residual effects of pharmacological intervention, altered mental state and alertness, surgical alterations of anatomical structures of the oral and pharyngeal cavity, aero-digestive tract surgeries, cervical spine surgeries, head and neck surgeries, neurosurgeries, cardiovascular surgeries, neuromuscular degenerative diseases and comorbidities associated with aging and prolonged hospitalization[4-6].
may be dysphagia.

Conclusions

- ✓ **Oropharyngeal dysphagia is highly prevalent in ICU patients.**
- ✓ The **penetration and aspiration** of the larynx **is a major concern of dysphagia**, but we cannot overlook the findings of pharyngeal residue and saliva stasis.
- ✓ The absence of saliva stasis may not rule out swallowing disorders and the pharyngeal residue should be considered an early sign of dysphagia, a surrogate of dysphagia.
- ✓ Saliva pooling is a strong predictor of pharyngeal residue and may be dysphagia.

We suggest that FEES should be performed to look for surrogate of dysphagia such as saliva stasis, pharyngeal food residue, laryngeal penetration and laryngeal-tracheal aspiration, and once detected, we should be emphatic that **speech therapy is essential for the clinical management** of these patients through swallowing function exercises program. The risk of bronchoaspiration by dysphagia may be responsible for the restriction of the oral pathway in the installation of alternative supply routes as well as the cause of pneumonia.

References

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