

**Definition, Prevalence and Burden of Oropharyngeal Dysphagia: A Serious Problem among Older Adults Worldwide and the Impact on Prognosis and Hospital Resources.**

Definição, prevalência e custo das disfagias orofaríngeas: um sério problema entre os idosos no mundo, e o impacto no prognóstico e nos recursos hospitalares

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Source

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Abstract

Oropharyngeal dysphagia describes difficulty with eating and drinking. This benign statement does not reflect the personal, social, and economic costs of the condition. Dysphagia has an insidious nature in that it cannot be 'seen' like a hemiplegia or a broken limb. It is often a comorbid condition, most notably of stroke, and many other neurodegenerative disorders. Conservative estimates of annual hospital costs associated with dysphagia run to USD 547 million. Length of stay rises by 1.64 days. The true prevalence of dysphagia is difficult to determine as it has been reported as a function of care setting, disease state and country of investigation. However, extrapolating from the literature, **prevalence rises with admission to hospital and affects 55% of those in aged care settings. Consequences of dysphagia include malnutrition, dehydration, aspiration pneumonia and potentially death. The mean cost for an aspiration pneumonia episode of care is USD 17,000, rising with the number of comorbid conditions. (O custo médio do atendimento de um episódio de pneumonia por aspiração é de US\$ 17.000 dólares, aumentando o número de comorbidades).**

Whilst financial costs can be objectively counted, the despair, depression, and social isolation are more difficult to quantify. Both sufferers and their families bear the social and psychological burden of dysphagia. **There may be a cost-effective role for screening and early identification of dysphagia, particularly in high-risk populations. A avaliação e a identificação precoce de disfagia, podem apresentar uma redução efetiva nos custos, particularmente com o risco de aspiração dessa população**

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## **Prevalence and prognostic implications of dysphagia in elderly patients with pneumonia**

### **Prevalência e prognóstico implicações de disfagia em pacientes idosos com pneumonia**

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#### **Abstract**

**Background:** oropharyngeal dysphagia is a common condition among the elderly but not systematically explored.

**Objective:** to assess the prevalence and the prognostic significance of oropharyngeal dysphagia among elderly patients with pneumonia.

**Design:** a prospective cohort study.

**Setting:** an acute geriatric unit in a general hospital.

**Subjects:** a total of 134 elderly patients (>70 years) consecutively admitted with pneumonia.

**Methods:** clinical bedside assessment of oropharyngeal dysphagia and aspiration with the water swallow test were performed. Demographic and clinical data, Barthel Index, Mini Nutritional Assessment, Charlson Comorbidity Index, Fine's Pneumonia Severity Index and mortality at 30 days and 1 year after admission were registered.

**Results:** of the 134 patients, 53% were over 84 years and **55% presented clinical signs of oropharyngeal dysphagia**; the mean Barthel score was 61 points indicating a frail population. Patients with dysphagia were older, showed lower functional status, higher prevalence of malnutrition and comorbidities and higher Fine's pneumonia severity scores. They had a higher mortality at 30 days (22.9% vs. 8.3%,  $P = 0.033$ ) and at 1 year of follow-up (55.4% vs. 26.7%,  $P = 0.001$ ).

**Conclusions:** oropharyngeal dysphagia is a highly prevalent clinical finding in elderly patients with pneumonia and is an indicator of disease severity in older patients with pneumonia.

**(Do total de 134 doentes idosos (> 70 anos) internados com pneumonia, 55% apresentaram sinais clínicos de disfagia orofaríngea).**

Age Ageing (2010) 39 (1): 39-45.

## **Consequence of dysphagia in the hospitalized patient: impact on prognosis and hospital resources.**

### **Conseqüência da disfagia no paciente hospitalizado: impacto sobre o prognóstico e recursos hospitalares**

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#### Source

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#### Abstract

##### OBJECTIVE:

To determine if comorbid dysphagia in all hospitalized patients has the potential to prolong hospital stay and increase morbidity. Dysphagia is increasingly prevalent with age and comorbid medical conditions. Our research group has previously shown that dysphagia is a bad prognostic indicator in patients with stroke.

**DESIGN:** Analysis of national database.

##### MAIN OUTCOME MEASURES:

The National Hospital Discharge Survey (NHDS), 2005-2006, was evaluated for presence of dysphagia and the most common comorbid medical conditions. Patient demographics, associated disease, length of hospital stay, morbidity and mortality were also evaluated.

##### RESULTS:

There were over 77 million estimated hospital admissions in the period evaluated, of which 271,983 were associated with dysphagia. Dysphagia was most commonly associated with fluid or electrolyte disorder, esophageal disease, stroke, aspiration pneumonia, urinary tract infection, and congestive heart failure.

**The median number of hospitalization days for all patients with dysphagia was 4.04 compared with 2.40 days for those patients without dysphagia. (O número médio de dias de internação para todos os pacientes portadores de disfagia foi de 4,04 em comparação com 2,40 dias para os pacientes sem disfagia).**

**Mortality increased substantially in patients with dysphagia associated with rehabilitation, intervertebral disk disorders, and heart diseases.**

##### CONCLUSIONS:

Dysphagia has a significant impact on hospital length of stay and is a bad prognostic indicator. Early recognition of dysphagia and intervention in the hospitalized patient is advised to reduce morbidity and length of hospital stay.

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## Swallowing dysfunction after prolonged intubation: analysis of risk factors in trauma patients.

Disfunção de deglutição após intubação prolongada: análise de fatores de risco em pacientes com trauma.

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### BACKGROUND:

**The clinical significance of post-extubation swallowing dysfunction (PSD) is profound, resulting in both increased morbidity and mortality.** Specific risk factors have not been described in an injured patient cohort. The purpose of this pilot study was to elucidate independent factors that predict PSD in this population.

### METHODS:

A retrospective cohort analysis was performed on 150 consecutive trauma patients intubated for more than 48 hours. Assessment of swallowing function after extubation was performed by a simple bedside speech pathology evaluation. Patients then were divided into 2 groups: those with and those without PSD. Backwards stepwise logistic regression analysis then was used to determine independent predictors of PSD after controlling for important injury characteristics and patient demographics.

### RESULTS:

**The incidence of PSD in our study cohort was 41%. (**

**A incidência de disfagia pós extubação no estudo foi de 41%)**

Patients with PSD, although older than non-PSD patients (48 vs 37.5 y;  $P = .001$ ), were similar with respect to admission Glasgow coma score (GCS) and injury severity score. Regression analysis revealed that age older than 55 years (odds ratio, 2.60;  $P = .037$ ; 95% confidence interval, 1.1-6.4) and ventilator days (odds ratio, 1.14;  $P = .001$ ; 95% confidence interval, 1.1-1.2) were significant independent risk factors for PSD. Interpretation of these odds ratios revealed that those patients older than age 55 had more than a 2.5-fold greater risk of PSD. The risk increased by 14% for every day a patient required intubation. There was no significant association between PSD and injury severity score, GCS, presence of medical comorbidities, or development of nosocomial pneumonia.

### CONCLUSIONS:

PSD is a common occurrence in trauma patients. Age older than 55 years and ventilator days are independent risk factors for PSD. Injury severity, altered GCS upon arrival, comorbidities, and nosocomial pneumonia were not independent risk factors for PSD in our cohort. These results suggest that older patients with

extended intensive care unit stays and ventilator requirements may benefit from early swallowing evaluation.

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## **Incidência de Disfagia em Unidade de Terapia Intensiva de Adultos**

### **Incidence of dysphagia in Intensive Therapy Service of adults**

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#### **RESUMO**

Objetivo: verificar a incidência e o grau de disfagia orofaríngea em indivíduos internados em Unidade de Terapia Intensiva (UTI) e Semi-Intensiva, correlacionando os achados com a doença de base. Métodos: nesse estudo foram avaliados 25 pacientes da UTI e Semi-UTI do Hospital Centro Médico Maranhense. Os dados foram colhidos por meio de um protocolo de avaliação fonoaudiológica. Resultados: dos 25 pacientes avaliados 18 (**74%**) **apresentaram disfagia orofaríngea**, sendo que 11 (61%) tiveram como doença de base lesão neurológica, e 7 (39%) tiveram como doença de base comorbidades não neurológicas. Houve associação significativa entre a presença de disfagia e doença de base neurológica. Dos 18 pacientes disfágicos, 8 (45%) apresentaram disfagia de grau leve, 4 (22%) disfagia de grau moderado e 6 (33%) disfagia de grau grave. Deste total, dos pacientes com doença de base neurológica: 03 (27%) apresentaram grau leve, 03 (27%) apresentaram grau moderado e 05 (46%) pacientes apresentaram grau grave. Já os pacientes acometidos por doença de base não neurológica apresentaram: grau leve 05 pacientes (72%), grau moderado 01 paciente (14%) e grau grave 01 paciente (14%). Conclusão: **os dados apontam alta incidência de quadros de disfagia orofaríngea em pacientes internados na Unidade de Terapia Intensiva e Semi-intensiva**, com associação significativa entre a presença de disfagia e doença de base neurológica; o grau grave de disfagia orofaríngea foi predominante nas doenças de base neurológica, e o grau leve de disfagia orofaríngea foi predominante nas doenças de base não neurológica.

DESCRITORES: Transtornos de Deglutição; Unidades de Terapia Intensiva; Fonoaudiologia

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**Disfagia orofaríngea em pacientes submetidos à entubação orotraqueal**  
***Oropharyngeal dysphagia in patients submitted to orotracheal intubation***  
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**RESUMO**

**Objetivo:** Detectar e caracterizar as alterações da fase oral e faríngea da deglutição, bem como verificar a ocorrência de penetração e aspiração laríngeas em pacientes submetidos à entubação orotraqueal.

**Métodos:** O estudo incluiu 30 adultos internados na unidade de tratamento intensivo do Hospital Estadual Mário Covas, que receberam entubação

orotraqueal no período de 40 horas a 15 dias. Todos foram submetidos, por duas vezes, à avaliação endoscópica da deglutição, na primeira e segunda semanas, após a extubação, sendo observadas as alterações da fase oral e faríngea da deglutição e a presença de penetração e aspiração laríngeas.

**Resultados:** Na primeira avaliação, **as alterações da fase oral estiveram presentes em 19(63,3%) pacientes e, na segunda, em 12(40%).** As alterações da fase faríngea ocorreram na primeira avaliação em **27(90%) pacientes e, na segunda, em 8(26,7%).** A penetração e a aspiração laríngeas foram detectadas nas duas avaliações, sendo diferentes para cada consistência e volume testados.

**Conclusão:**

**A população submetida à entubação orotraqueal após a extubação apresenta alterações das fases oral e faríngea da deglutição caracterizadas por uma variedade de comprometimentos e acompanhadas de penetração e aspiração laríngea.**

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