DYSPHAGIA PRESENCE IN A BURN SERVICE

Pavez Axel^(a,b); Alzate Adriana^(b); Martínez Macarena^(a); Arriagada Cristian^(b)

^(a) Department of Speech, Language and Hearing Sciences. Universidad de Chile. Santiago, Chile.

^(b) Burn Service, Hospital de Urgencia Asistencia Pública. Santiago, Chile.

INTRODUCTION

Dysphagia is a frequent burn-related side effect due to invasive airway procedures and orofacial tissue compromise. This condition can lead to pneumonia⁽¹⁾, dehydration and nutrition deficiencies⁽²⁾. Speech-language therapist (SLT) has a key role in dysphagia management. Swallowing intervention in burn patients dates back to 25 years ago⁽³⁾. Previous studies have characterized swallowing disorders in this population. The only reported estimation of dysphagia incidence rate was found to be 11.18%⁽⁴⁾. In Chile this intervention remains incipient.

OBJECTIVE

Determine the incidence of dysphagia and characterize this disorder in patients from the Burn Service of Hospital de Urgencia Asistencia Pública (HUAP) Santiago, Chile.

MATERIAL & METHODS

➤ **Participants:** all patients admitted to the Burn Service who survive from June to November 2015 (n = 49).

Inclusion criteria:

- Head and neck burns
- Intubation (OTI) > 48 h
- Inhalation injury
- Presence of tracheostomy
- Complaints expressed by the patient, family or multidisciplinary team members.

Exclusion criteria:

- Neurological conditions
- Previous swallowing disorders.

➤ **Procedures:** Clinical bedside swallowing assessment was performed by SLT including: a) review of medical records; b) functional swallowing assessment (oral motricity and glottal function evaluation); c) progressive intake assessment (2 consistencies: water and pudding). Severity degree of dysphagia was quantified according to the "Dysphagia Outcome and Severity Scale" (DOSS)⁽⁵⁾.

➤ Data was analyzed with SPSS 22.0 statistical software.

RESULTS

24 patients met the inclusion criteria, 1 patient was excluded due to previous swallowing disorder. 23 patients were included. Dysphagia was found in 15 patients (65.2%) in different severity degrees.

Fig. 1. Presence of Dysphagia

Fig. 2. Severity of Dysphagia (acording DOSS scale)

Fig. 3. Dysphagic vs Non-Dysphagic group characteristics

CONCLUSION

It was found a high incidence of dysphagia in different severity degrees. Several variables may contribute to the development of this condition in burn patients, being orotracheal intubation (OIT) of major concern. The inclusion of SLT in the burn team is crucial for a safety oral intake restoration, the reduction of associated risks and quality of life improvement.

1. Langmore SE, Terpenning MS, Schork A, Chen Y, Murray JT, Lopatin D, Loesche WJ. Predictors of aspiration pneumonia: how important is dysphagia?. *Dysphagia*. 1998;13(2):69-81.
2. Via, M.A. and J.I. Mechanick. Malnutrition, Dehydration, and Ancillary Feeding Options in Dysphagia Patients. *Otolaryngologic Clinics of North America*, 2013;46(6):1059-1071.
3. Williams AI, Baker BM. Advances in burn care management: role of the speech-language pathologist. *Journal of Burn Care & Research*. 1992; Nov 1;13(6):642-9.
4. Rumbach AF, Ward EC, Cornwell P, Basset L, Khan A, Muller M. Incidence and Predictive Factors for Dysphagia After Thermal Burn Injury: A Prospective Cohort Study. *J Burn Care Res* 2011;32:608-616.
5. O'Neill KH, Purdy M, Falk J, Gallo J. The Dysphagia Outcome and Severity Scale. *Dysphagia* 1999;14 (3):139-45.