

## Prevalence of feeding and swallowing disorders among patients admitted to Hospital A

Yumiko Hashimoto<sup>1)\*</sup>, Masako Nakayama<sup>1)</sup>, Taizo Kaneto<sup>2)</sup>

1) Department of Nursing, NHO Tottori Medical Center

2) Department of Neurology, NHO Tottori Medical Center

\*Correspondence: hashimoto-yumiko@tottori-iryo.hosp.go.jp

### Abstract

Hospital A mainly provides national policy-based medical services for patients with intractable neurological diseases (INMD), children and persons with severe motor and intellectual disabilities (SMID), psychiatric patients, and individuals requiring recovery and rehabilitation programs. To determine the prevalence of feeding and swallowing disorders among patients admitted to this hospital, we analyzed patient records regarding the primary disease, age, level of functional oral intake, use of drugs contributing to dysphagia, episodes of pneumonia, and other parameters. The majority of the patients included in the analysis had feeding and swallowing problems and an increased risk of aspiration. Overall, 11% had an episode(s) of pneumonia, most of which was probably due to aspiration. Pneumonia occurred at a similar rate irrespective of the mode of feeding, either oral or non-oral intake, and may be more likely to occur during the transition phase from alternative nutrition to oral intake. The results suggest that, to avoid aspiration pneumonia, it is necessary to modify food textures, the posture during eating, and mode of feeding according to the level of oral-motor and swallowing functions of each patient, identify factors that can impair the swallowing function, and monitor the risk of silent aspiration. The majority of patients admitted to the psychiatric ward received drugs that can suppress the swallowing reflex and, therefore, potentially had an increased risk of choking, indicating the need to fully recognize and address the risk of choking in this patient group. Tottori J. Clin. Res. 7(2), 179-183, 2016

Key Words: feeding and swallowing, dysphagia, Food Intake Level Scale (FILS), aspiration pneumonia, functional dysphagia therapy, dysphagia committee

### Introduction

The major function of Hospital A is to provide national policy-based medical services for patients with INMD, tuberculosis, SMID and psychiatric illnesses, and to provide rehabilitation programs for individuals requiring recovery. The prevalence of feeding and swallowing disorders among patients admitted to the hospital was analyzed in relation to the primary disease, age, level of functional oral intake, use of drugs contributing to dysphagia, and episodes of pneumonia. This report describes the findings of the analysis, including an increased risk of aspiration and patient characteristics associated with pneumonia, along with several issues identified in the study.

### I. Subjects and Methods

1) All patients receiving inpatient care at Hospital A on October 15, 2012 (n = 399) were evaluated

regarding:

(a) age (the percentage of elderly patients aged 65 years or older) and the primary disease;  
(b) functional oral intake rated based on the Food Intake Level Scale, ranging from levels (Lvs) 1 to 10, developed by Fujishima et al.<sup>1)</sup>, and the need for assistance during meals (feeding assistance); and  
(c) the use of antiepileptics (phenytoin and sodium valproate) and antipsychotics (haloperidol, chlorpromazine, risperidone, and olanzapine), which are major agents that can reduce the swallowing reflex, during a period of one month (October 2012).

2) Episodes of pneumonia occurring during a 17-month period, between August 1, 2011 and December 31, 2012, were analyzed. The analysis focused on hospital-acquired pneumonia developed in hospitalized patients, and community-acquired pneumonia in patients admitted for the treatment of