



Case Report

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A Case Report : “Is there a Need for Early Swallowing Test After a Stroke?”



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Introduction

Dysphagia is a frequent clinical finding post-stroke [1]. The clinical picture of dysphagia may include several complications such as feeding difficulties, dehydration, malnutrition and reduced quality of life [2,3]. Of special clinical significance is the presence of aspiration pneumonia that may lead to death [4]. The diagnosis of dysphagia is especially vital in this clinical population especially during the acute stage. The two main diagnostic methods that can be implemented to diagnose potential swallowing disorders are the clinical examination and the instrumental assessment. The clinical data suggest that the prevalence of swallowing disorders post stroke during the acute care is 51-55% [5] when the clinical assessment was utilized, and 64-78% when the instrumental methods were utilized [6].

A common clinical practice is the placement of a nasogastric tube (NGT) during the acute care of stroke patients [7,8]. The goal of this procedure is to reduce the possibility of development aspiration pneumonia. We report a case with post-stroke dysphagia and describe the critical role of swallowing evaluation in the acute phase.

Case Report

A 79-year-old female patient with an ischemic cerebrovascular accident (CVA) was transferred to the Rehabilitation Clinic of University Hospital of Ioannina for rehabilitation. She had previously been hospitalized for thirty-six days to the pathology department of a general hospital in a rural area of Greece, where the CVA was diagnosed and initially treated. The medication prescribed during this period was: tb clopidogrel 75 mg po

(S:1X1), dexamethasone phosphate 1cc iv (S: 1X3), mannitol 70cc iv (S:1X4), omeprazole iv (S:1x1), enoxaparin sodium 0,6 sc (S:1x2), tb atorvastatin 20 mg po (S:1X1), tb amlodipine sodium 5mg po (S:1X1). She was also given begalin 1,5 mg iv (S:1X3) for 14 days.

Upon arrival to university hospital of Ioannina, a brain CT scan was performed and confirmed the diagnosis of ischemic CVA by the presence of subdense areas in the right frontal and parietal lobes. During the physical examination, she had labored breathing, and coarse crackles were found during auscultation. Her laboratory exams were unremarkable. A chest CT scan was ordered, which revealed bronchopneumonia. A bedside dysphagia assessment was performed by a speech language pathologist. Swallowing trials revealed difficulty swallowing liquids and solids as a result of a generalized weakness in swallowing mechanism. NGT placement was decided as a mean of safe feeding.

The medication prescription was modified such as: omeprazole iv (S:1x1), begalin 1,5mg iv (S:1x3) for 14 days, enoxaparin sodium 0,6 sc (1x2), clopidogrel 75 mg po (1x1), tb atorvastatin 20 mg (1x1), tb fungostatin (S:1x1) and, tb amlodipine sodium 5 mg (S:1x1). A video fluoroscopic swallowing study (VFSS) was performed. Liquid, semisolid and solid textures were tested. The study's results revealed residue on the level of vocal folds. The patient required repetitive swallowing to remove the residue.

The patient participated in an intensive program of speech therapy consisted of everyday sessions of 40 minutes duration, five times a week. The therapy program included tasks of oral-

motor and isometric exercises targeting the strengthening of swallowing mechanism.

Discussion

In our case report, we present a patient with post-stroke dysphagia and describe the vital role of clinical swallowing evaluation in patient's management during acute care. The case report emphasizes the vital role of early clinical swallowing evaluation during the acute phase of stroke.

The contemporary early prophylactic use of antibiotics in acute stroke patients may mask the appearance of bronchopneumonia due to aspiration and therefore it may mislead the initial patient's care. Two clinical implications can be deduced for managing patients with post-stroke dysphagia during acute care. The first is the vital role of NGT placement during the acute phase especially till the point where a clinical swallowing evaluation is available [9]. The second is the importance of the early clinical as well instrumental by VFSS (when possible) swallowing evaluation during the acute phase of stroke in order to exclude possible swallowing disorders that may be present as well as to determine the safety of feeding for the patient. Clinical evaluation of swallowing utilizing a bed side protocol is essential as it provides the clinician with critical information about the patient's swallowing skills especially when the instrumental assessment is not available [10-12]. The lack of the instrumental evaluation and specifically the VFSS is common in hospitals in rural areas. The early diagnosis of dysphagia is an important clinical factor that contributes to the development of aspiration pneumonia [4].

In conclusion, based on our clinical experience in acute care of patients with stroke, we are in line with clinical data that the early clinical evaluation and diagnosis of swallowing difficulties during the hospital admissions are of high importance for patient's safety [1,2]. The combination of instrumental and non-instrumental assessment tools provides the rehabilitation team with the best clinical data for the accurate diagnosis and management of the patient with swallowing disorders due to stroke.

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