

CLINICAL AND SURFACE EMG SCREENING OF
NEUROGENIC DYSPHAGIA

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of M.Sc in neuropsychiatry

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Abstract

Background :

Dysphagia caused by neurological disorders involves the first two phases of swallowing , It occurs in approximately 14% of patients in acute care setting . Dysphagia increase risk of aspiration pneumonia, malnutrition and dehydration.

Rapid diagnosis of the swallowing disorder is mandatory for early identification of those patients with dysphagia

Objective

To introduce surface electromyography (SEMG) as a simple diagnostic screening test for rapid assessment of swallowing in patients, to compare clinical assessment of swallowing with surface electromyography results and to detect rapid ,easy predictor of dysphagia .

Methods

This study included 40 patients had ischemic stroke , 20 patients had myasthenia gravis and 40 normal control. The following were done : Detailed history taking and full neurological examination ,Stroke severity were assessed by NIHSS, Patients and control were tested for dysphagia clinically using Gugging Swallowing Screen test and neurophysiologically by sEMG of muscles involved in swallowing ,EMG and repetitive stimulation for myasthenic patients and CT brain for stroke patients.

Results:

In dysphagic patients whether in stroke or Myasthenic group SEMG amplitude was lower and duration was higher .

SEMG amplitude was found to be significant predictor of dysphagia

Conclusion :

SEMG of swallowing is a simple and reliable method for screening and initial evaluation of dysphagia .This noninvasive radiation-free examination has a low level of discomfort, and is simple, time saving and inexpensive to perform.

Key word : dysphagia , Stroke , Myasthenia Gravis ,SEMG

