ABSTRACT

Title: Incidence, risk factors and complications of dysphagia in stroke patients admitted to medical wards at a tertiary hospital in south India

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Objectives: 1. To determine the incidence of swallowing dysfunction in stroke. 2. To study the factors associated with swallowing dysfunction in stroke. 3. To determine the incidence of aspiration pneumonia in stroke. 4. To determine factors associated with development of aspiration pneumonia in dysphagia.

Methods: This is a prospective cohort study. We recruited 100 patients with acute stroke from medical wards and swallowing assessment was done by principal investigator using Mann’s assessment of swallowing, by speech therapist and by Fibreoptic endoscopic evaluation of swallowing. The patients were followed up for a period of 3 months. The main outcomes were improvement in dysphagia and pneumonia. The secondary outcomes were death and duration of hospitalization. The relation between various factors and outcomes was also assessed.
Results: Dysphagia was seen in 77 patients. The dysphagia improved with time and at the end of 3 months, 18 patients had dysphagia. Dysphagia was significantly associated with mortality (28% vs 4.5%; p=0.04). Pneumonia was seen in 28 patients. Pneumonia was associated with a significantly high mortality rate (59.3% vs 8.6%; p=0.001) and prolonged duration of hospitalization (8.86 vs 6.33; p=0.001). Weak gag reflex was found to be associated with dysphagia. No independent factors predicting pneumonia were found.

Conclusion: There is a high incidence of dysphagia and pneumonia in acute stroke. Pneumonia is associated with significant mortality and prolonged duration of hospitalization.

Key words: Dysphagia, stroke, aspiration pneumonia