

DYSPHAGIA SCREENING FOR PATIENTS WITH UPPER TO MIDDLE ESOPHAGEAL CANCER AT HIGH RISK FOR ASPIRATION PNEUMONIA

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Background

Aspiration pneumonia caused by dysphagia is life-threatening in patients with esophageal cancer. Early detection of high-risk patients for aspiration pneumonia can prevent interruptions of anti-cancer treatment.

Purpose

- 1.To determine the detection rate of combined "Eating Assessment Tool questionnaire (EAT-10)" and "Water Swallowing Test (WST)" in high-risk patients for aspiration pneumonia.
- 2.To determine the time interval between dysphagia screening and onset of aspiration pneumonia.
- 3.To evaluate the cost-effectiveness of dysphagia screening.

Methods

A total of 30 participants with upper to middle esophageal cancer were enrolled in the single-group quasi-experimental study to receive "EAT-10 " and "WST" screening. The participants were assessed daily for 14 days total. SPSS for statistical analysis.

Results

- 1.We enrolled 30 participants. The mean EAT-10 score was 6.5 (SD=0.72, range: 3-15). WST showed abnormal results in 7/30 (23.3%) of participants, normal of WST was 23/30 (76.7%). The incidence rate of aspiration pneumonia in high-risk participants was 23.3% (7/30).
- 2.The time interval between dysphagia screening and onset of aspiration pneumonia were 2,3,4,5,7 (mean=4.0) days in 1,2,2,1,1 of participants respectively.
- 3.Compared with any other radiological diagnostic examinations, combined of EAT-10 and WST screening can reduce medical budget by over 600 times.

Conclusion

Our study supports the hypothesis that EAT-10 and WST were rapid, non-invasive, safe, convenient, low-cost and also effective for detection of high-risk patients for aspiration. Screening can help us with appropriate prevention in timely manner.

Application

EAT-10 and WST can provide pivotal information immediately. We recommend using EAT-10 and WST upon initial assessment of patients with upper to middle esophageal cancer.