Dysphagia is a common complication following intubation and can lead to serious complications including aspiration pneumonia or pneumonitis, malnutrition, and increased mortality. The risk for post-extubation dysphagia (PED) is increased when known medical history factors or physical exam findings exist. Additional factors such as duration of intubation can increase this risk. Multiple methods exist to effectively evaluate for PED. These methods differ by cost and time required. In low risk patients, nurses can accurately and safely evaluate for dysphagia using a 3-oz water swallow challenge. Vidant Medical Center (VMC) does not have a policy that guides clinicians to the most appropriate evaluation for PED.

OBJECTIVES

• Develop a decision guide to help determine which patients should receive a clinical swallowing evaluation post-intubation

METHODS

• Multidisciplinary team constructed a two-step PED evaluation policy with a 14-question PED risk screening before a 3-oz water swallow challenge
• Inclusion criteria was any patient intubated for <48 hours in the VMC medical intensive care unit (MICU)
• The policy was instituted and the study ran from 9/1/17 through 8/31/18
• Study data was compared against a control group of unscreened qualifying patients using a one-way ANOVA
• The EHR was utilized to demonstrate the number of Speech-Language Pathology (SLP) clinical swallowing evaluations during our study period as well as the 12 months prior

REFERENCES


RESULTS

• 216 minutes – average time from extubation to screening
• 902 minutes – average time from clinical swallowing evaluation order to completion
• Decreased SLP clinical swallowing evaluations by 16.4%

• The PED risk screening yielded a pass rate of 68.89%
• 96.01% of patients who passed the screening then passed the 3-oz water swallow challenge
• No incidences of aspiration pneumonia or pneumonitis

• Group 1 was evaluated for PED sooner than Group 2 and 3 (p<0.0001)
• Group 4 was evaluated for PED sooner than Group 2 (p=0.002) and Group 3 (p=0.0001)
• Group 1 has significantly less variability than Group 4 (p<0.0001)

• In this subset of patients, the policy allows providers to safely restart diets in a more timely manner
• The separation into lower and higher risk groups by use of the PED screening provides a clinically supported reason to request an SLP clinical swallow evaluation
• The addition of an SLP clinical swallow evaluation for PED is linked to significantly increased time before clearance to a diet
• A reduction of SLP consults on patients at low risk for PED allows for more efficient use of resources

FUTURE SUGGESTIONS

• Institute the policy across all VMC ICUs with the exception of the Neurosurgical ICU
• Create a flowsheet in the EHR to increase ease of use for nursing staff
• Evaluate the throughput of the units to monitor for changes to length of stay after introduction of the policy
• Examine the financial implications of decreased SLP clinical swallowing evaluations

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