Silent Aspiration in High-Risk Populations: A Literature Review to Support Early SLP Evaluation

Tristan Cox, M.S., CCC-SLP Bambi Patterson, MCD, CCC-SLP

BACKGROUND

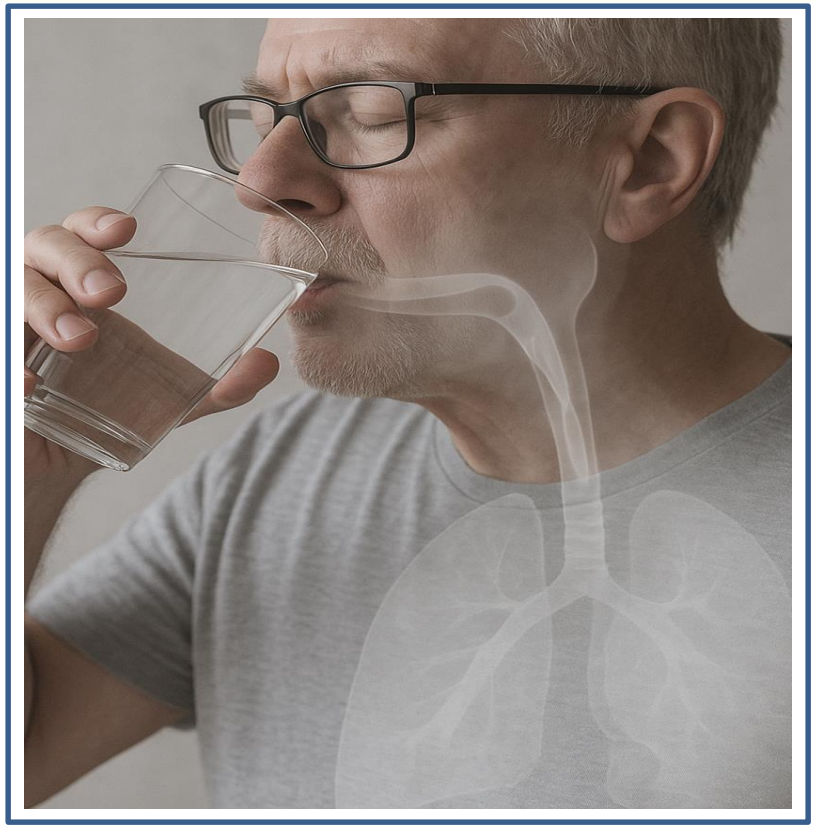
Silent aspiration, defined as entry of material into the airway without overt clinical signs, is a significant risk in medically complex patients and often goes undetected. At University Medical Center (UMC), populations such as post-cardiothoracic surgery (CABG, TAVR), recently extubated patients, those with tracheostomies, head and neck cancer (HNC), burn patients, and patients who've suffered acute cerebrovascular accidents (CVAs) are frequently affected. This quality improvement project aims to promote awareness of current best practices surrounding early identification and interdisciplinary response.

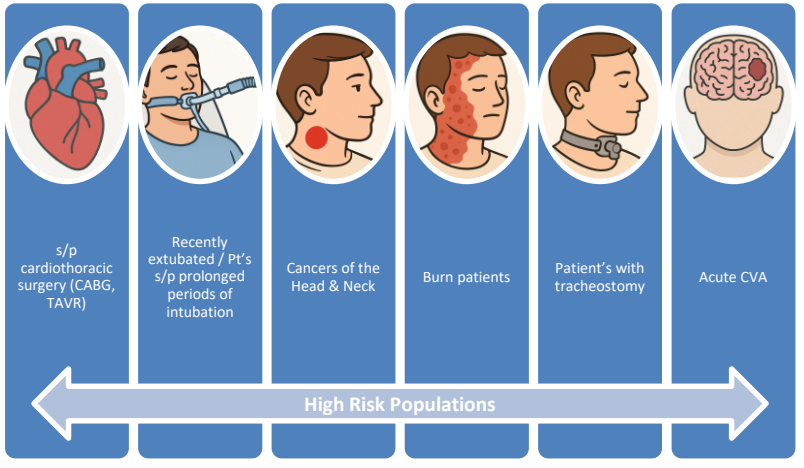
PURPOSE

To summarize current evidence regarding the risk factors, identification considerations, and potential consequences of silent aspiration in hospitalized adults, and to reinforce the importance of timely speech-language pathology (SLP) consultation

METHODS

Targeted literature review to identify high quality evidence related to silent aspiration in the above high-risk groups. Articles selected based on relevance to acute care settings and applicability to SLP practice.





RESULTS

Literature consistently identifies neurologic impairment, structural changes, prolonged intubation, tracheostomy, and surgical disruption as key risk factors. Early SLP involvement is associated with reduced pulmonary complications, improved nutritional outcomes, and timely progression of oral intake.

CONCLUSIONS

Silent aspiration poses a serious risk across multiple inpatient populations. Literature supports the development of standardized SLP referral pathways and interdisciplinary education to improve early detection and outcomes.

REFERENCES

See poster author for reference list.

PATHWAY DESIGNATED