

Aspiration Pneumonia

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February, 2015

What is aspiration pneumonia?

- Aspiration pneumonia is a lung infection that develops after food, liquid or vomit is aspirated or inhaled into the lungs. If the aspirated material is not coughed up, bacteria can grow in the lungs and cause an infection.
- A major concern with those living in LTC (long term care) settings, aspiration pneumonia is associated with a high risk of morbidity and mortality, even following successful treatment. Therefore, prevention of aspiration is essential in this population. Although aspiration pneumonia has multiple contributing factors that cause this disease, the three major risk factors that can significantly lower the risk when properly addressed include dysphagia, dental hygiene, and medication use. Comprehensive interventions for these risk factors is best achieved using a multidisciplinary approach that incorporates the efforts of healthcare professionals within nursing, nutrition, speech-language pathology, dentistry, pharmacy, and medical concentrations.
 - Dysphagia is defined as a sensation of difficulty or abnormality of swallowing. Several interventions that have been used to manage dysphagia include posture changes swallowing therapy, dietary modification, and tube feeding.
 - Poor oral hygiene and dental care is often neglected in LTC residents. Poor dental hygiene has a significant impact on overall health, including risk for aspiration and associated pneumonia. Missing some or all teeth and poor fitting dentures can lead to chewing and swallowing difficulties, increasing the risk of aspiration. Having poor oral hygiene and periodontal disease may spread existing bacteria in the mouth and throat to the lungs if aspirated, which can lead to pneumonia.
 - LTC residents that take more than nine medications, significantly increase their risk of a variety of complications. Therefore, it is important to consider the side effects of some of the commonly prescribed medications and the potential to contribute to aspiration pneumonia. Such side effects include dry mouth which makes swallowing more difficult. Others may impair the ability to swallow such as neuroleptics, sedatives, hypnotics, and antiepileptics.

Additional Risk Factors to Consider:

- Age, being male, poor dental hygiene, lung disease, swallowing difficulties, diabetes mellitus, severe dementia, malnutrition, Parkinson's disease, use of antipsychotic drugs, proton pump inhibitors, such as Protonix, Nexium and Prevacid and angiotensin-converting enzyme inhibitors or ACE inhibitors. Examples of ACE inhibitors are Lisinopril, Captopril, and Enalapril.
- Reduced functional status, resident in institutional setting, prolonged hospitalization or surgical procedures, impaired consciousness, chronic swallowing disorders, mechanical airway interventions, immuno-compromised, history of smoking, antibiotic therapy, advanced age, reduced pulmonary clearance, diminished cough reflex, disrupted normal mucosal barrier, impaired mucociliary clearance, alter cellular and humoral immunity, obstruction of the airways, and damaged lung tissue.