

# Aspiration Pneumonia and Dysphagia

Adapted from ADVANCE for Speech-Language Pathologists & Audiologists

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*Kathy Groves-Wright*

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Speech-language pathologists strive to keep risks associated with oral intake to a minimum so the person with dysphagia stays as healthy as possible in spite of their swallowing impairment.

Aspiration pneumonia refers to a diverse group of disorders characterized by infiltration of the lower respiratory tract. The condition occurs when the pulmonary complications result from a breakdown of normal protective mechanisms for the airway, including glottic closure, the cough reflex, neuromuscular coordination, and clearing mechanisms of the respiratory tract (Groves-Wright, 8).

Aspiration of food material and secretions is a relatively common event. In healthy individuals aspiration may occur as high as 25 percent without pulmonary complications. Even though there is an increase in the amount of dysphagia research, still little is understood about the relationship between aspiration and the development of pneumonia. The relationship seem to be related to the frequency, amount, and type of material that is aspirated, as well as to other factors relating to the individual's overall health. These factors may lead to an increase in incidence, although the direct relationship has not been found.

Dysphagia can be associated with other conditions which include reduced levels of consciousness, neurological deficits, mechanical disruption of glottic closure and esophageal problems.

Reflux is believed to be responsible for the increased incidence of aspiration pneumonia in tube-fed patients.

There are three broad categories of aspiration pneumonia:

1. Mechanical obstruction: aspiration of fluids or solids that are not inherently toxic to the lungs but block the airway or lead to reflux airway closure (Bartlett, 1989).
2. Chemical pneumonia: fluids or solids that are toxic to the lower airways and initiate an inflammatory reaction that occurs independently of bacterial infection.
3. Bacterial pneumonia: is any infection of the lungs resulting from aspiration of bacteria in the upper airway.

Another factor that has been found to correlate significantly with an increase in dental disease is poor oral hygiene which causes an increased level of oral cavity bacteria.

The increase in bacteria can be a result of illness, poor oral and dental care, salivary changes, and dependence on others for oral hygiene and feeding. SLPs can play an important role in educating the clients, family members, nurses, and aids about the importance of oral/dental hygiene maintenance in patients with dysphagia, specifically before and after the meal.

There are other factors besides dysphagia that are likely to influence whether an individual will develop aspiration pneumonia, including the degree of immunocompromise, respiratory status, level of caregiver support, overall health status, and level of independence in activities of daily living, such as feeding and oral care (Groves-Wright, 17).

All of these factors listed about should be taken into consideration when making recommendations about oral intake and care.