

Intubation and Aspiration

Food material found in the airway or trachea in an autopsy gives the impression the patient choked to death and suggests liability on the providers' part. That may be the case, some deaths simply are by choking and secondary to failure on the part of a caregiver to follow diet orders, feeding tactics, postural recommendations, compensatory strategies and/or other safe swallow recommendations.

There are other reasons, however, for food material to be in the trachea or airway, not indicative of a choking death. One of the more common ways material enters the airway or blocks the trachea is intubation. Intubation, also known as tracheal intubation or endotracheal intubation is a common and generally safe procedure that can be lifesaving but carries very serious risks such that in most cases, intubation is only performed if survival would not be possible without it.

During intubation, a healthcare provider uses a laryngoscope to guide an endotracheal tube into the mouth or nose, through the pharynx then into the trachea or windpipe. The tube keeps the trachea open so that air can get through to the lungs. The tube is often connected to a machine that delivers oxygen or a bag that forces air into the lungs.

Placement of the breathing tube can induce the gag reflex, which can lead to vomiting of the stomach contents. Vomitus with food material can become stuck on or within the intubation tube and move into the trachea. The presence of large amounts of emesis (vomit) can camouflage lumps of food moving into the trachea, especially given that the procedure must be rapidly completed on a non-breathing patient.

In one study, aspiration during intubation was compared between pre-hospital intubations and intubation occurring in the hospital. Tracheal aspirates were found in 50% of pre-hospital intubated patients and 22% of those intubated in the hospital. The study determined that persons intubated in the hospital were less likely to aspirate but nonetheless demonstrated aspiration is not uncommon in hospital intubated patients.

In an actual choking death, the tracheobronchial foreign body will have occluded the airway resulting in asphyxiation prior to intubation. Events documented are likely to indicate whether death was consistent with choking or more likely resuscitative efforts caused material to enter the airway peri or post death.

Speech Language Pathologist do not determine cause of death (COD). Speech Language Pathologists evaluate dysphagia in a variety of medical conditions and educate patients, staff and the public on how they impact communicative, cognitive, airway protection and swallowing functions. The insight of a Speech Language Pathologist in determining whether the documented event is consistent with choking to death can be invaluable to your case. Contact Megan M Hamilton MS CCC-SLP at hamilton@liosmanheLLC for forensic Speech Language Pathology expertise.