There has been tremendous growth and progress in airway management in the past four decades, despite an increase in high-risk groups such as patients of extreme size and weight, trauma, and obstructive sleep apnea, to name a few. The introduction and refinement and widespread adoption of airway management guidelines, coupled with technological advances such as the introduction and widespread use of newer supraglottic airways, indirect laryngoscopes (video laryngoscopes), advances in invasive airway emergency methods, advanced methods of peri-intubation oxygenation methods such as noninvasive positive pressure ventilation, and high-flow nasal oxygenation, have revolutionized how we approach the airway in elective and emergency settings. Airway management procedures are required in patients of all demographics and are performed by health care providers with different experience and training backgrounds. While the trends seem promising, significant adverse events still occur, and we must not let our guard down.

A recent international consensus guideline sheds light on an old airway management adverse event. The members of the Project for Universal Management of Airways (PUMA) came out with Management Guidelines for preventing unrecognized or undetected esophageal intubation. These new guidelines were endorsed by seven airway management societies from across the world. Some readers might be taken aback. Is there a need for such guidelines in the 21st century? Chances are that every practitioner has experienced firsthand, during laryngoscopy and intubation, a case in which the endotracheal tube (ETT) accidentally ends up in the esophagus. If this happens and it is immediately recognized, little harm comes out of misplaced ETTS. The real problem comes when the ETT is misplaced, there is delayed recognition, or it is missed altogether. This may result in severe, irreversible hypoxic brain damage or even death.

The exact rate of unrecognized esophageal intubation is unknown. Incidences as high as 4–26% of all intubations have been reported in high-risk groups such as trauma, low-flow states, and neonates. While it is estimated that more cases occur outside the operating room and when the procedure is carried out by nonanesthesia personnel, anesthesia professionals are not immune to unrecognized esophageal intubations. The incidence of unrecognized esophageal intubation in the ASA Closed Claims Analysis (CCA) depends on the era reported. In the 1980s, it was responsible for 6% of all closed anesthesia malpractice claims. In the 1990s, the ASA mandated that the adequacy of ventilation be continually evaluated through the detection of exhaled carbon dioxide unless invalidated by the nature of the patient, procedure, or equipment. As a result, the occurrence fell dramatically and led to unrecognized esophageal intubation being considered by some as “virtually extinct”; in the latest 2019 CCA revision, there were no reported cases. In the 2011 National Audit Project IV (NAP4) database, there were nine cases of unrecognized esophageal intubation; it was the second most common adverse event that resulted in death or disability. As a result, the Difficult Airway Society and the Royal College of Anaesthetists in Great Britain championed a successful campaign to mandate capnography whenever airway procedures occurred. Unfortunately, other cases happened afterward that could not be attributed to the lack of detection of exhaled CO₂. The publication of these new guidelines, an accompanying editorial, and several letters to the editor suggest that unrecognized esophageal intubation remains a significant concern for all health professionals engaged in airway management and it is under-reported.

As these new guidelines suggest, we must follow strict protocols to reduce the incidence of esophageal intubation altogether. Using video-laryngoscopy as a first-choice device seems prudent and backed up by literature. However, this is currently not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is currently not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is commonly not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is commonly not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is commonly not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is commonly not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries. Ensuring correct tracheal tube placement after every intubation is commonly not universally possible and remains aspirational due to perceived cost and limited resources even in affluent countries.

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patient on a mechanical ventilator. This becomes evident after administration of neuromuscular agents. There are many anecdotal reports of patients with misplaced ETTs who can breathe so long as their diaphragmatic function is preserved; once this ceases, after muscle relaxation, profound deterioration and desaturation will occur.

Esophageal intubation can happen even in the hands of experienced health care professionals. It is not just a problem for inexperienced or less skilled providers. It may not always be possible to prevent esophageal intubations. The goal should be to prioritize and work on measures to help prompt the detection of tracheal tube placement. These new guidelines remind us to resist being complacent and passive in promoting measures to decrease undue patient harm.

In conclusion, these newly published Guidelines on preventing unrecognized esophageal intubation shed a modern view on an old problem, a low-frequency, high-impact adverse event. Despite many technological advances and successes, there is still a lot to be learned. No patient should be harmed by unrecognized esophageal intubation, and we should all abide by the fundamentals to reduce this unwanted event.

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