Difficult tracheal tube insertion: A new phraseology

To the Editor: Difficult endotracheal intubation commonly results in morbidity and mortality. To overcome such complications, the airway is assessed preoperatively. An intubation is considered difficult if an appropriately trained anesthesiologist needs more than three attempts or more than 10 minutes for successful endotracheal intubation.

The airway is usually assessed using the modified Mallampati test (MMT), head and neck extension, mouth opening, the upper-lip bite test, Cormack-Lehane grading (CLG) and a number of other preoperative tests and models. The MMT and CLG categorise difficulty on the basis of whether the glottis and epiglottis are visualised or not. In some patients, despite the fact that the structures in the oral cavity can be visualised, difficulty is encountered during the passage of the endotracheal tube (ETT) through the glottis, so smaller ETTs are used to ensure an unimpeded passage. Such a difficulty arises when the diameter of the trachea is smaller than that of the ETT, i.e. the internal diameter of the ETT far exceeds the tracheal diameter.

There are many definitions of different scenarios of difficult intubation, which can be summed up as follows: difficult tracheal intubation is defined as tracheal intubation requiring multiple attempts, and occurs in 1.5 - 8.5% of patients who undergo tracheal intubation. Difficult direct laryngoscopy refers to inability on the part of the laryngoscopist to visualise the larynx because of anatomical abnormality or distortion of the larynx or trachea. There is, however, no mention in the literature of airways that appear to be simple during laryngoscopy and CLG, but turn out to be exceedingly difficult when actual insertion is being attempted. We consider that for such cases a new phrase, difficult tracheal tube insertion (DTTI), should be employed. Fortunately cases of DTTI can be managed successfully if smaller-size tubes are used or a malleable guide is introduced into the ETT prior to its insertion through the glottic opening.

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