Checklist for endotracheal tube tolerance

Tolerance is a subjective, multifaceted concept: in favor of a higher value (health), a lesser competing value (ETT) is accepted. Usually, most patients accept the ETT in favor of a faster recovery.

In some conditions, clinicians may interpret signs of tongue movements or biting on the ETT as intolerance, and increase sedation. Contrary, only a few patients want deep sedation when having an ETT – being sedated means losing control of one’s thinking (e.g., sedation is frequently associated with delirium or confused thinking).

In general, ETT tolerance may be increased by:

1. Appropriate assessment and management of pain, anxiety, delirium;
2. Explaining to the patient regarding their situation and purpose of ETT;
3. Offering the ability of expression of thoughts/emotions (e.g., letter boards, pen/paper, electronic devices);
4. The presence of devices for orientation (e.g., clock, calendar);
5. Distractions (family presence, television, tablets, radio/music);
6. Rehabilitation (e.g., in-bed-exercises, sitting in a chair, walking);
7. Offering patients the opportunity to express their desires for how care is delivered when appropriate (e.g., yes/no, visual-analog scales, rating scales, forced choice*);
8. Soft ETT;
9. Early shift to pressure support ventilation; adjusting patient trigger for ventilator assistance;

Limitations

• In case of serious patient-ventilator dyssynchrony, call for a physician and consider interventions
• For specific populations, early extubation and followed by non-invasive ventilation may help as well.

*Forced choice is a limited set of options presented to the patient and may take the forms of multiple choice, this or that, choosing of objects presented, etc.

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<th>The breathing tube in my mouth ...</th>
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| is uncomfortable, but I can cope with it | • Provide encouragement to patient and continue assessing frequently  
  • Sometimes a simple explanation/short dialogue is best: If appropriate, allow the patient to express the discomfort |
| hurts | • Sometimes patients’ tongues are not comfortably situated. Sometimes the tube or tape is pinching, sticking, catches a lip: Reposition, then reassess  
  • Assess pain, adapt analgesia  
  • Consider bolus analgesia before suctioning  
  • Consider analgesic spray in the mouth |
| makes me feel anxious | • Assess anxiety, inform the patient about their situation, reassure them that you are here to take care of them  
  • Allow family presence, consider a phone call to family (hold phone on patient’s ear, translate mimic).  
  • Assess preferred distraction methods (TV, music, reading, prayer, meditation, rehabilitation, mobilization) |
| makes me restless and/or confused | • Assess delirium frequently and initiate delirium management (mobilization, sleep during night, reduce frequency of vital signs checks, family presence, appropriate medications, etc.) |
| I don’t understand it | • Repeat information about the patient’s situation  
  • Ask family to be present and to inform patient about critical illness.  
  • Show patient with a mirror, guide patient’s hand to ETT for better understanding, show pictures, explain purpose and function of tube |
| too much suctioning | • Decrease duration and frequency of endotracheal suctioning  
  • Manage fluid balance to decrease secretions |
| makes me short of breath | • Ask patient for his perception of depth and frequency of breathing  
  • Adapt ventilator settings and assess anxiety (as per above) |
| I can’t talk | • Offer communication aids: letter boards, pen/paper, electronic devices, etc.  
  • Ensure they have eye glasses or hearing aids if needed. If patients are unable to move their arm, develop a consistent and deliberate yes/no (avoid unclear responses like eye blinks). |
| makes me feel dependent | • Provide encouragement and ask patient for if they have any requests and provide a sense of control (e.g., regarding position in bed, light, noise, pillow comfort, mobilization, consider letting them schedule mobilization times etc.)  
  • Consider “guided suctioning” : place patient’s hand on your forearm, so that the patient can stop suctioning |
| makes too much pressure in throat | • Assess cuff pressure, ask patient for evaluation  
  • Assess depth of ETT to determine appropriate placement  
  • Consider analgesic spray in the mouth |
| I can’t swallow | • Consider suctioning  
  • Assess cuff pressure, ask patient for evaluation  
  • Consider medication to reduce saliva |
| ETT holder is uncomfortable | • Offer patient different position of ETT  
  • Consider different type of fixation or adjust fixation to be more comfortable  
  • Consider pinching of skin/tissues and placement of the tongue |
| ETT keeps moving | • Ask patient for tolerance  
  • Reposition of ETT (avoid ETT contact on uvula, faucial arches, posterior pharyngeal wall) |