**DIFFICULT AIRWAY ALGORITHM**

1. Assess the likelihood and clinical impact of basic management problems:
   - Difficulty with patient cooperation or consent
   - Difficult mask ventilation
   - Difficult supraglottic airway placement
   - Difficult laryngoscopy
   - Difficult intubation
   - Difficult surgical airway access

2. Actively pursue opportunities to deliver supplemental oxygen throughout the process of difficult airway management.

3. Consider the relative merits and feasibility of basic management choices:
   - Awake intubation vs. intubation after induction of general anesthesia
   - Non-invasive technique vs. invasive techniques for the initial approach to intubation
   - Video-assisted laryngoscopy as an initial approach to intubation
   - Preservation vs. ablation of spontaneous ventilation

4. Develop primary and alternative strategies:

   **AWAKE INTUBATION**
   - Airway approached by Noninvasive intubation
     - Invasive Airway Access\(\text{a,b}\)
       - Succeed\(\ast\)
         - Cancel Case
       - FAIL
         - Consider feasibility of other options\(\text{a}\)
           - Invasive airway access\(\text{b,}\text{c}\)

   **INTUBATION AFTER INDUCTION OF GENERAL ANESTHESIA**
   - Initial intubation attempts successful\(\ast\)
     - FROM THIS POINT ONWARDS CONSIDER:
       1. Calling for help.
       2. Returning to spontaneous ventilation.
       3. Awakening the patient.
     - Initial intubation Attempts UNSUCCESSFUL

   **FACE MASK VENTILATION ADEQUATE**
   - NONEMERGENCY PATHWAY
     - Ventilation adequate, intubation unsuccessful
       - Alternative approaches to intubation\(\text{a}\)
         - Successful intubation\(\ast\)
           - FAIL after multiple attempts
             - Invasive airway access\(\text{b,}\text{c}\)
               - Consider feasibility of other options\(\text{a}\)
                 - Awaken patient\(\text{a}\)
                   - Emergency invasive airway access\(\text{b}\)

   **FACE MASK VENTILATION NOT ADEQUATE**
   - CONSIDER/ATTEMPT SGA
     - SGA ADEQUATE\(\ast\)
       - SGA NOT ADEQUATE OR NOT FEASIBLE
     - SGA NOT ADEQUATE
       - IF BOTH FACE MASK AND SGA VENTILATION BECOME INADEQUATE
         - Emergency noninvasive airway ventilation\(\text{a}\)
           - Successful ventilation\(\ast\)
             - FAIL
               - Emergency invasive airway access\(\text{b}\)

   **FAILED INTUBATION ATTEMPTS**
   -ifr both face mask and SGA ventilation become inadequate
     - CALL FOR HELP
   -awaken patient
   -emergency invasive airway access

\(\ast\)Confirm ventilation, tracheal intubation, or SGA placement with exhaled CO\(_2\).

a. Other options include (but are not limited to): surgery utilizing face mask or supraglottic airway (SGA) anesthesia (e.g., LMA, ILMA, laryngeal tube), local anesthesia infiltration or regional nerve blockade. Pursuit of these options usually implies that mask ventilation will not be problematic. Therefore, these options may be of limited value if this step in the algorithm has been reached via the Emergency Pathway.

b. Invasive airway access includes surgical or percutaneous airway, jet ventilation, and retrograde intubation.

c. Alternative difficult intubation approaches include (but are not limited to): video-assisted laryngoscopy, alternative laryngoscope blades, SGA (e.g., LMA or ILMA) as an intubation conduit (with or without fiberoptic guidance), fiberoptic intubation, intubating stylet or tube changer, light wand, and blind oral or nasal intubation.

d. Consider re-preparation of the patient for awake intubation or canceling surgery.

e. Emergency non-invasive airway ventilation consists of a SGA.

Fig. 1. Difficult Airway Algorithm.