Alaa hussein Algobouri (practical anesthesia) forth stage

Endotracheal intubation

Is a skill performed by multiple medical specialists to secure a patient's airway as well as provide oxygenation and ventilation, Direct and indirect laryngoscopy are the two most common approaches utilized for endotracheal intubation

Indications of endotracheal intubation

1. Upper airway obstruction.
2. Respiratory failure.
3. Loss of consciousness.
4. For supporting ventilation during general anesthesia.
5. Patients at risk of pulmonary aspiration.
6. Difficult mask ventilation.
7. Any patient in danger of upper airway obstruction (e.g. Burns of the upper airways).
8. Cardiac arrest (during CPR).

Airways assessment

1. Mallampati classification: This test is performed with the patient in the sitting position, head in a neutral position, the mouth wide open, and the tongue protruding to its maximum.

1. Class I: Visualization of the soft palate, uvula, and anterior and posterior pillars.
2. Class II: Visualization of the soft palate and uvula.
3. Class III: Visualization of soft palate and base of uvula.
4. Class IV: The only hard palate is visible. The soft palate is not visible at all. Class III, IV difficult to intubate.

2. Interincisor gab: Normal >4.5 cm.

3. Thyromental distance: more than 6 cm.

4. Flexion and extension of the neck.

Aba najwal

Preparing the procedure...

Essentials must be present to ensure safe intubation! They can be remembered by the word SALT

• Suction. This is extremely important. Often patients will have secretions in the pharynx, making visualization of the vocal cords difficult.

• Airway. the oral airway is a device that lifts the tongue off the posterior pharynx, often making it easier to mask and ventilate apatient. Also, a source of O2 with a delivery mechanism (Ambu bag and mask) must be available.

• Laryngoscope. This is vital to placing an endotracheal tube.

• Tube. Endotracheal tubes come in many sizes. In the average adult a size 7.0 or 8.0 ID endotracheal tube.

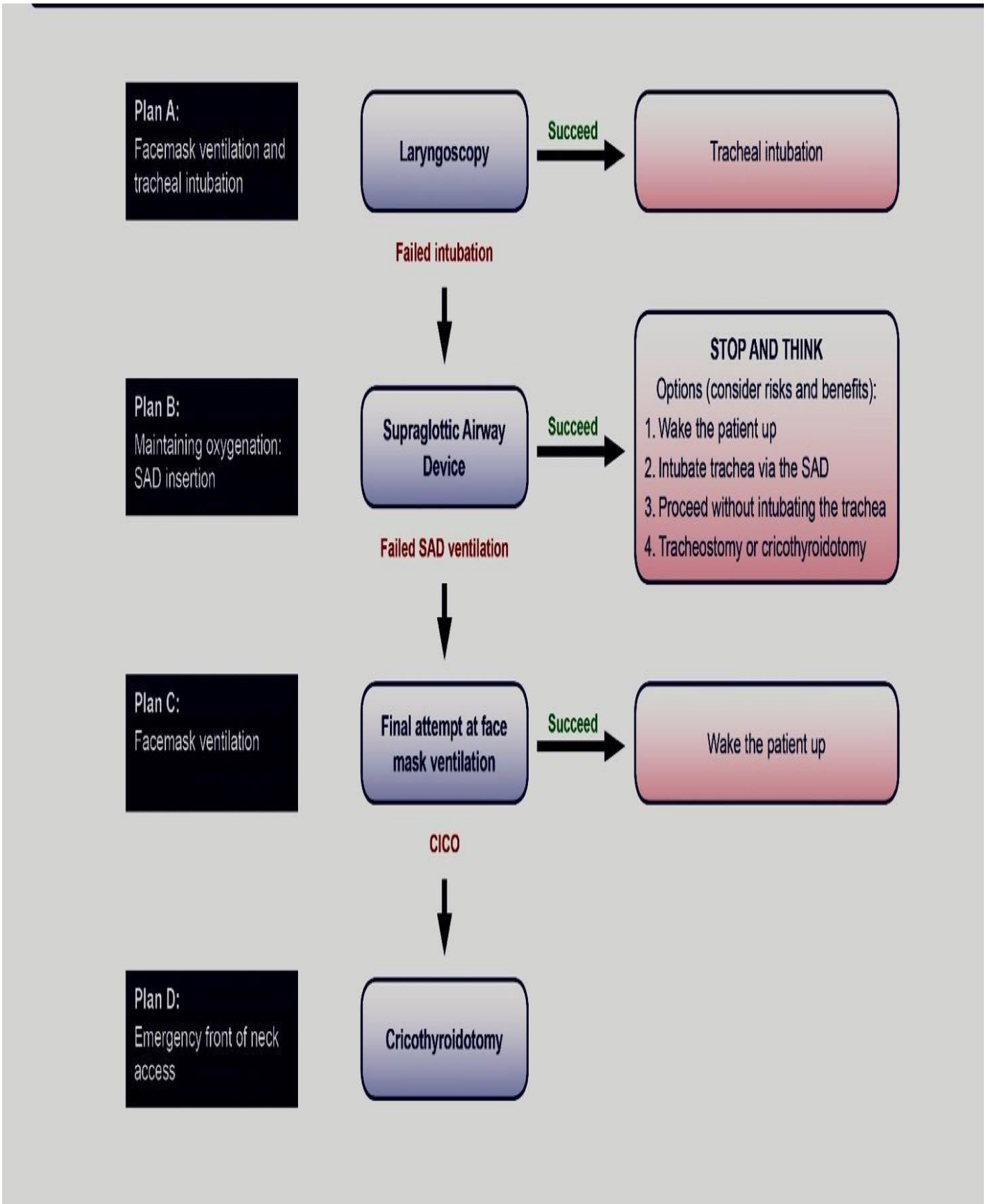
Instrument used

1. ▪ Ambu bag, tube, and oxygen source.
2. ▪ Plaster or tube holder.
3. ▪ Introducer (stylets or Magill forceps).
4. ▪ Laryngoscope.
5. ▪ Suction apparatus.
6. ▪ Syringe, 10-mL, to inflate the cuff.
7. ▪ Gloves.
8. ▪ Pulse oximeter.
9. ▪ Stethoscope

Diffecult intubation

2021 American Society of Anesthesiologists defines a difficult airway as the clinical situation in which anticipated or unanticipated difficulty or failure is experienced by a physician trained in anesthesia care, including but not limited to one or more of the following: facemask ventilation, laryngoscopy, ventilation using a supraglottic airway (LMA), tracheal intubation.

Aaa najwal


Plan A:
Facemask ventilation and tracheal intubation
Laryngoscopy
Succeed
Tracheal intubation
Failed intubation
Plan B:
Maintaining oxygenation: SAD insertion
Supraglottic Airway Device
Succeed
STOP AND THINK
Options (consider risks and benefits):
1. Wake the patient up
2. Intubate trachea via the SAD
3. Proceed without intubating the trachea
4. Tracheostomy or cricothyroidotomy
Failed SAD ventilation
Plan C:
Facemask ventilation
Final attempt at face mask ventilation
Succeed
Wake the patient up
CICO
Plan D:
Emergency front of neck access
Cricothyroidotomy