

AIDAA 2016 Guidelines for the Management of Unanticipated Difficult Tracheal Intubation in Paediatrics



CALL FOR HELP

STEP 1: Laryngoscopy and tracheal intubation

Unable to intubate during first attempt at direct/video laryngoscopy

- Continue nasal oxygen
- One more attempt at intubation (only if SpO₂ ≥ 95%)
- Final attempt only by an anaesthesiologist with paediatric experience
- Mask ventilation between attempts
- Optimise position, use external laryngeal manipulation, use bougie/stylet if required
- Consider changing device/ technique/ operator between attempts
- Maintain depth of anaesthesia

Succeed

Confirm tracheal intubation using capnography

Failed Intubation

Resume Mask Ventilation with 100% O₂

STEP 2: Insert SAD to maintain oxygenation

- Continue nasal oxygen
- Preferably use second generation SAD
- Maximum two attempts (only if SpO₂ ≥ 95%)
- Mask ventilation between attempts
- Consider changing size or type of SAD
- Maintain depth of anaesthesia

Succeed

Consider one of the following options:

1. Wake up the child
2. Continue anaesthesia using SAD if considered safe
3. Intubate through the SAD using a FOB only, provided expertise is available
4. Tracheostomy

Failed Ventilation through SAD

STEP 3: Rescue face mask ventilation

- Continue nasal oxygen
- Ensure neuromuscular blockade
- Final attempt at face mask ventilation using optimal technique and oral/nasal airways
- Consider insertion of a gastric tube

Succeed

Wake up the child

Complete Ventilation Failure

CALL FOR ADDITIONAL HELP

STEP 4: Emergency surgical airway access

- Continue nasal oxygen and efforts at rescue face mask ventilation
- Perform one of the following techniques

Child < 8 years

- ▶ Surgical help available : Tracheostomy
- ▶ Surgical help unavailable :
 - < 5 years - Transtracheal needle puncture
 - 5 to 7 years needle cricothyroidotomy

Child ≥ 8 years

- ▶ Needle cricothyroidotomy (use pressure regulated jet ventilation and attempt to keep the upper airway patent)

This flow chart should be used in conjunction with the text

FOB = Fibreoptic bronchoscope
O₂ = Oxygen

SAD = Supraglottic airway device
SpO₂ = Oxygen saturation

Post-procedure plan

1. Further airway management plan
2. Treat airway oedema if suspected
3. Monitor for complications
4. Counseling and documentation