PREDICTORS OF DIFFICULT AIRWAY

Difficult bag mask ventilation (MOANS)

MASK SEAL:- Beard, crusted blood on face
Disruption of lower facial continuity

OBESITY, OBSTRUCTION:- Obesity, Pregnancy, angioedema
Ludwig's angina, upper airway
abscess, epiglottis

AGE: > 55 yrs

NO TEETH: Consider leaving dentures in for
edentulous pts.

SLEEP APNEA, STIFF LUNG

Difficult extraglottic device (RODS)

Restricted mouth opening

Obstruction

Disrupted (or) Distorted airway (trauma, burns)

Stiff lung, Cervical Spine (poor lung compliance)

Difficult cricothyrotomy (SHORT)

S Surgery or other airway obstruction.

H Hematoma (includes infection & abscesses)

O Obesity

R Radiation distortion (and other deformity)

T Tumour.

Difficult laryngoscopy & Intubation - (LEMON)

L OOK EXTERNALLY: Use clinical gestalt, evidence of lower facial disruption. Including, small mouth, agitated pt.

E VALUATE : Use 3:3:2 rule:

⇒ Mouth opening (3 fingers)

⇒ Mandibular Space : Chin to hyoid (3 fingers)

⇒ Glottic Space :- Hyoid to thyroid notch (2 fingers)

MALLAMPATI Score :- In order of ↑ difficulty (I to IV)

OBESITY, OBSTRUCTION: Obesity - poor glottic viewe

4 cardinal signs of upper airway obstruction

→ Stridor

→ Muffled Voice

→ Difficult Swallowing Secretions

→ Sensation of dyspnea.

NECK MOBILITY :- Consider using video laryngoscopy

Eg: Trauma, arthritis, Ankylosing Spondylitis

Difficulty in creating Surgical airway

B - Bleeding Tendency

A - Agitated pt.

N - Neck Scarring, Neck flexion deformity

G - Growth & Vascular abnormality in the region of Sx.

Mx of CICO

Failed intubation, failed oxygenation in the paralysed, anaesthetised patient

DAS 2015

CALL FOR HELP

↓ Continue 100% O_2
Declare CICO

Plan D: Emergency front of neck access

Continue to give oxygen via upper airway
Ensure neuromuscular blockade
Position patient to extend neck

Scalpel cricothyroidotomy

Equipment: 1. Scalpel (number 10 blade)
2. Bougie
3. Tube (cuffed 6.0mm ID)

Laryngeal handshake to identify cricothyroid membrane

Palpable cricothyroid membrane

- Transverse stab incision through cricothyroid membrane
- Turn blade through 90° (sharp edge caudally)
- Slide coude tip of bougie along blade into trachea
- Railroad lubricated 6.0mm cuffed tracheal tube into trachea
- Ventilate, inflate cuff and confirm position with capnography
- Secure tube

Impalpable cricothyroid membrane

- Make an 8-10cm vertical skin incision, caudad to cephalad
- Use blunt dissection with fingers of both hands to separate tissues
- Identify and stabilise the larynx
- Proceed with technique for palpable cricothyroid membrane as above

Post-operative care and follow up

- Postpone surgery unless immediately life threatening
- Urgent surgical review of cricothyroidotomy site
- Document and follow up as in main flow chart

This flowchart forms part of the DAS Guidelines for unanticipated difficult intubation in adults 2015 and should be used in conjunction with the text.