

PHYSIOLOGIC FACTORS TO CONSIDER IN EMERGENCY INTUBATIONS

	HYPOTENSION	HYPOXIA	METABOLIC ACIDOSIS	ELEVATED ICP/HTN Crisis	ASTHMA/COPD/CHF
Preparation	Give IVF/Blood prn Push-dose pressor on hand and NOREPINEPHRINE drip ready with IO/Central line access if hypotension expected to persist beyond the peri-intubation period	If simple NR mask + NP @ 15L/min fail to achieve 95% sat, then try: NP at 15L/min + BVM with 10 of PEEP with capnography If combative -> DSI (see below)	While still breathing: NP at 15L/min + BVM + 10 of PEEP and capnography, note CO2 reading <i>then</i> push RSI drugs Keep RR to 12 while performing jaw thrust x 45 sec. NEVER LET THE PATIENT GO APNEIC!	AVOID at all cost: BP < 90, O2 sat < 90%, hypercapnia Stabilize before intubating; consider mannitol (1g/Kg) or hypertonic saline (especially if hypotensive)	If possible, do not intubate! Try NIPPV first May need ketamine (1mg/Kg) to help tolerate NIPPV
Intubation	Lower induction dose Higher paralytic dose	Will likely desaturate quickly	Most experienced should intubate	Pretreat with fentanyl + lidocaine (optional); most experienced should intubate	Pre-treat with lidocaine (optional)
Post-Intubation	Start low, go slow: Vt 6mL/Kg Low Pres. Support/PEEP May need pressor infusion to allow for adequate analgesia		Immediately increase RR to 30 Vt = 8mL/Kg, Inspiratory Time = 0.5 sec.	Keep head elevated and temperature normal; sedate well while avoiding hypotension (may need pressors); aim for PaCO2 35-38	Asthma, COPD: GIVE THEM TIME TO EXPIRE! Vt 6mL/Kg and RR 10 to start Keep plateau pressure < 30 at all times

INITIAL VENTILATOR SETTINGS for INTUBATED PATIENTS

RT on CALL 1-250-614-9626

	Most Cases	Asthma/COPD	Metabolic acidosis
VENTILATOR MODE	Assist Control Volume	Assist Control Volume	Assist Control Volume
Tidal Volume (Vt) = PROTECTION	6 - 8 mL/Kg (ideal body weight)	6 mL/Kg (ideal body weight)	8 mL/Kg (ideal body weight)
Inspiratory Time = COMFORT	0.5 - 1 sec.	< 0.5 sec	0.5 sec
RR = VENTILATION	18 and adjust as per target CO2	10 (give them time to expire!)	30 (Match pre-intubation RR)
FiO2/PEEP (aim for 88-95% Sat.)	0.3/5 - 0.4/5 - 0.4/8 - 0.5/8 - 0.5/10 - 0.6/10 - 0.7/10 - 0.7/12 - 0.7/14 - 0.8/14 - 0.9/16 - 0.9/18 - 1.0/18-24		
Plateau Pressure	Adjust Vt by 1 mL/Kg increments to keep plateau pressure < 30		

POST-INTUBATION CHECKLIST

Analgesia & Sedation	Order medications BEFORE intubating, and quickly administer as soon as ET tube secured in good position; treatment priorities: PAIN > ANXIETY > DELIRIUM ("PAD the Patient")
ET Tube depth	21 cm for women, 23 cm for men, 3 x ET tube size in kids
ET cuff pressure	INFLATE BEFORE BAGGING! Should be easy to squeeze and barely recover
Inline Suction	Must be connected between ETT and filter
ET Disconnecting	Ensure filter remains on ETT, perform inspiratory hold and clamp tube before disconnecting; be quick about it if patient no longer paralyzed!
Filter	Filter should be always interposed between ETT and ventilator/BVM, but after the inline suction segment
Elevate head	Elevate patient's head 30 degrees to reduce aspiration and facilitate ventilation
Restraints	Consider wrist restraints to prevent unwanted self extubation
CXR	To confirm ET tube position (2 - 3cm above carina) and look for complications
ABG (or VBG, with sat 90-95%)	30 min. after intubation or any change in ventilator settings
NG or OG Tube	To decompress stomach, prevent aspiration, easy ventilation
Nebbs	Don't forget to continue nebs for asthma/COPD patients, at least q20min.
Mouth wash	Chlorhexidine mouthwash decontamination may help reduce risk of aspiration pneumonia
DVT Prevention	LMWH, Ted Stockings
Ulcer Prevention	Adjust position q2h, low pressure mattress
Rescue equipment	BVM + PEEP valve at bedside, ready for use if ventilator malfunctions
Ventilator Alarms	"DOPE" : displacement, obstruction, pneumothorax, equipment failure LOW PRESSURE = leak in the system, disconnected HIGH PRESSURE = tube kinked/bitten, mucous plug, coughing, tension pneumothorax, ARDS