INTUBATION

Indications

Protect airway

Facilitate tracheal suctioning

Provide mechanical ventilation

Hazards

Right mainstem

Esophageal intubation

Vagal response

Equipment

BVM

ETT / Syringe

Stylet

Laryngoscope &

Magill Forceps

Placement v. positioning

Oral vs nasal intubation

MECHANICAL VENTILATION

TERMINOLOGY

TRIGGER

CYCLE

LIMITS

MODES

	VOLUME CONTROL	PRESSURE CONTROL
SET	TIDAL VOLUME & FLOW	INSP PRESSURE & INSP TIME
VARIES	INSP PRESSURE & INSP TIME	TIDAL VOLUME & FLOW

MODES

	CMV	AC	SIMV	CPAP
FREQUENCY				
TIME TRIGGERED BREATHS				
PT TRIGGERED BREATHS				
PRESSURE SUPPORT				

Initial Settings

Mode - AC or SIMV

Vt 6-8 ml/kg

RR 10-16

Flow 40-60 lpm

FiO2 40-60% or…

PEEP N/A

ALARMS

High Pressure

Low Pressure

High Ve

Low Ve

High Tidal Volume

Low Tidal Volume

Apnea

ADJUSTING FOR OXYGENATION

32-M, 70 KG
VENT SETTINGS:
AC, VC

SET RR	14
TOTAL RR	14
SET VT	460
FIO2	40%
PEEP	+5

pH	7.36
PaCO2	43
PaO2	53
HCO3-	24

ADJUSTING FOR OXYGENATION

32-M, 70 KG
VENT SETTINGS:
AC, VC

SET RR	14
TOTAL RR	14
SET VT	460
FIO2	60%
PEEP	+5

pH	7.36
PaCO2	43
PaO2	53
HCO3-	24

ADJUSTING FOR VENTILATION

32-M, 70 KG
VENT SETTINGS:
AC, VC

SET RR	14
TOTAL RR	14
SET VT	400
FIO2	40%
PEEP	+5

pH	7.21
PaCO2	63
PaO2	83
HCO3-	24

ADJUSTING FOR VENTILATION

32-M, 70 KG
VENT SETTINGS:
AC, VC

SET RR	14
TOTAL RR	14
SET VT	450
FIO2	40%
PEEP	+5

pH	7.21
PaCO2	63
PaO2	83
HCO3-	24

WAVEFORMS & LOOPS

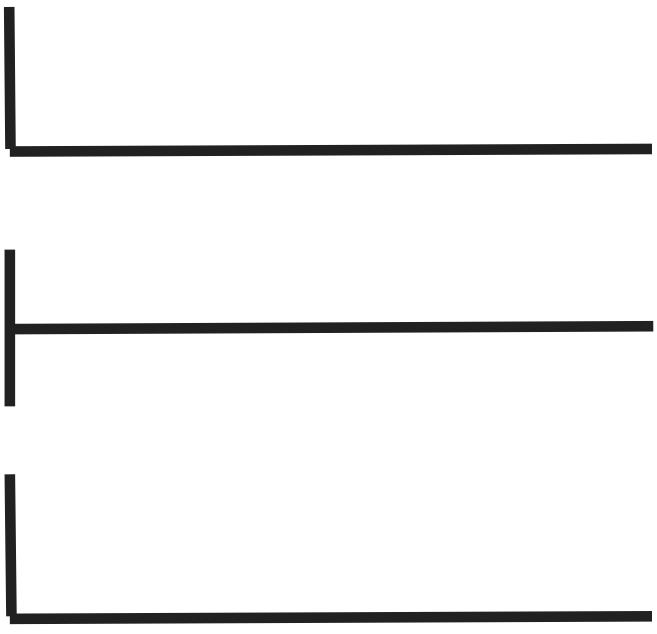
Pressure Waveform

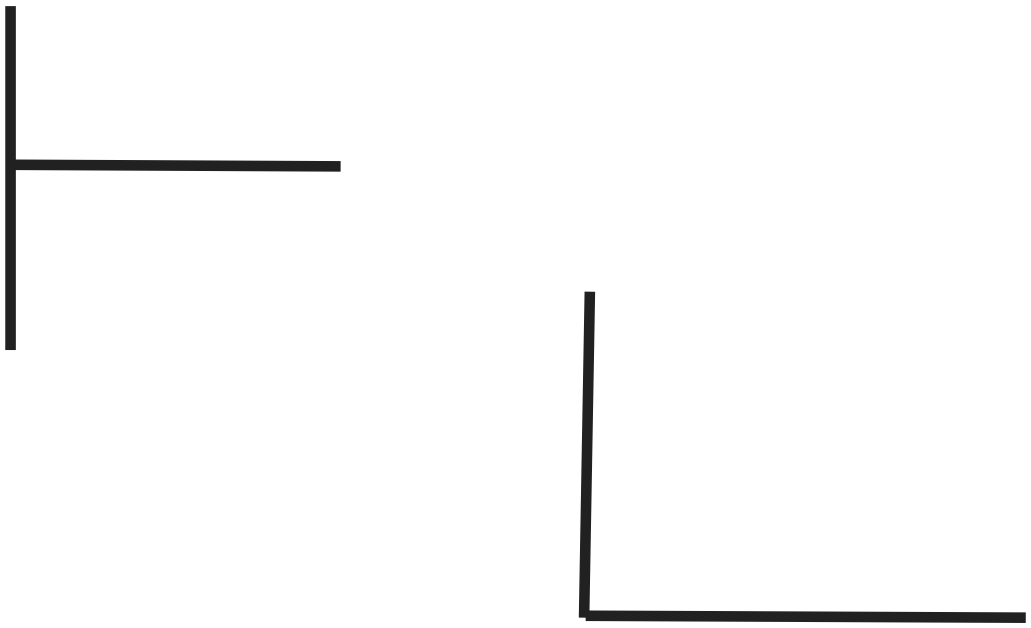
Flow Waveform

Volume Waveform

Flow-Volume Loop

Pressure-Volume Loop





TROUBLESHOOTING

Failure to trigger

Air-trapping

Hyperventilation in AC

TROUBLESHOOTING

Tachypnea in SIMV

Hemodynamic instability

Pneumothorax

WEANING

Spontaneous Breathing Trial

Proper sedation

Rapid Shallow Breathing Index

Negative Inspiratory Force

Vital Capacity

Cuff Leak

Sensorium

Extubation

Hyperoxygenate

Suction oral cavity & ETT

Unsecure ETT

Deflate cuff

Deep breath

Cool mist aerosol

Assess