

MANAGEMENT OF HYPOXEMIC RESPIRATORY FAILURE & ARDS

RESPIRATORY DISTRESS ($SpO_2 < 90\%$ with RA, RR > 30/min)

1. High flow oxygen – 5 L/min with nasal prongs/mask



NON INVASIVE VENTILATION (trial for 1 hour)



IF PATIENT ACUTELY DETERIORATES

(hemodynamic instability, abnormal mental status)



ENDOTACHEAL INTUBATION WITH MECHANICAL VENTILATION

Initial Tidal Volume-4 to 8 ml/kg

Plateau Pressure < 30cmH₂O

I : E ratio – 1 : 1.0-1.3

Oxygenation goal – PaO₂- 55 to 80mmHg or SpO₂-88 to 95%

1. Use these incremental FI_{O_2} -PEEP combinations to achieve oxygenation goal:

FI_{O_2}	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7
PEEP	5	5	8	8	10	10	10	12
FI_{O_2}	0.7	0.8	0.9	0.9	0.9	1.0	1.0	1.0
PEEP	14	14	14	16	18	20	22	24

Check Pplat, Spo₂, total RR, TV, ABG at least every 4hr

If Pplat>30cm of H₂O, decrease TV by 1ml/kg(min 4ml/kg IBW)

If Pplat <25cm H₂O and TV <6ml/kg, increase TV by 1ml/kg until Pplat>25cm H₂O or TV=6ml/kg

If Pplat<20cm H₂O and breath stacking occurs, one may increase TV in 1ml/kg increment (to max of 8ml/kg)



pH Goals: 7.30-7.45

- ACIDOSIS MANAGEMENT : pH<7.30

If pH=7.15-7.30, increase RR until pH>7.30 or Pco₂<25 mmHg(max RR=35) ;if RR=35 and Pco₂<25 mmHg,may give NaHco₃

If pH<7.15 and NaHco₃ considered or infused, TV may be increased in 1ml/kg steps until pH>7.15

- ALKALOSIS MANAGEMENT:pH>7.45 :decrease RR if possible

CLINICAL ASSESSMENT FOR WEANING

1. Place T-piece with 100% Oxygen



2. Assess the tolerance based on

SPO₂ ≥ 90

RR ≤ 35/min

No respiratory distress

Adequate muscle tone

Adequate Tidal volume

Haemodynamically stable

Consciousness



If tolerated for 30 minutes consider T-piece without oxygen for 3Hours

SPO₂ > 95 %



Extubation



Shift the patient to isolation ward and counsel the patient attendants regarding preventive aspects like wearing the mask and limited entry to the ward

CRITERIA FOR DISCHARGE:

Clinico- radiological improvement with

RT-PCR test should be **negative** in two samples at least 24 hours apart