

COVID ARDS Proning:

Set-up:	
Lines/access:	RIJ CVC & left radial arterial line
Infusions:	Sedatives, muscle relaxant, noradrenaline, IL crystalloid at 60 ml/hr
Airway:	ETT, 22cm at teeth
Ventilator:	PC-SIMV, Pinsp 25, PEEP 12, FiO ₂ 0.8, Vt 290 ml, RR 22
Other:	Emergency trolley Airway trolley Patient's notes and ITU chart Full PPE

Clinical Setting:

I: You are the ICU registrar called by the nurse of the patient in bed 3

S: Nurse reports patient is hypoxic

B: 50F with COVID-19, presented after 10-day history of pleuritic chest pain, fevers, dry cough, and progressive difficulty in breathing. CTPA- no PE, ground glass consistent with COVID. Confirmed COVID positive. Day 1-2 on high flow oxygen, day 3-4 in CPAP, admitted to ICU overnight, intubated yesterday (Size 8.0, Grade II view, 2s cm at the teeth)

A: Hypoxic despite being on FiO₂ 0.8

R: Called for help

Potential Clinical Course:

- Initially **A** ETT, 22 cm at the teeth, **B** SpO₂ 89% on FiO₂ 0.8 PC-SIMV Pinsp 25, PEEP 12, Vt 290 ml, ET CO₂ 5 kPa, RR 22, bilateral air entry, **C** HR 65 bpm SR, BP 110/60, **D** Sedated+ paralysed
- If FiO₂ is put up to 1.0- SpO₂ still does not improve.
- Following initial assessment, patient remains hypoxic and the aim is for the candidate to decide to prone and to proceed with the proning
- Manage emergency proning safely

Info Sheet For Faculty

- Initial settings:
 - SpO₂ 89% on FiO₂ 0.8
 - P_{insp} 25, PEEP 12, V_t 290
 - EtCO₂ 5 kPa
 - RR 22/min
 - Bilateral air entry
 - HR 65 bpm SR
 - BP 110/60

- Progress to:
 - SpO₂ 88% on FiO₂ 1.0
 - P_{insp} 25, PEEP 12, V_t 290
 - EtCO₂ 5 kPa
 - Bilateral air entry
 - HR 65 bpm SR
 - BP 110/60

- Progress to:
 - SpO₂ 99% on FiO₂ 1.0 (once prone)
 - P_{insp} 25, PEEP 12, V_t 290
 - EtCO₂ 5 kPa
 - Bilateral air entry
 - HR 65 bpm SR
 - BP 110/60

Faculty Roles:

Bedside Nurse 1:

- You are a critical care nurse
- You are looking after a 50F with COVID-19, intubated yesterday
- You have noticed that despite being on 80% oxygen, her saturation is still hovering between 87% and 89%
- You are concerned that something is wrong or that something needs to be done about this.
- You take direction well, and can perform tasks asked if you in a timely fashion
- If the candidate asks nothing unexpected has happened. The patient just slowly gradually became more hypoxic.

Bedside Nurse 2:

- You are a new starter – you have never seen an ARDS patient before
- You are quite startled when asked questions/given directions, requiring instructions to be repeated to you
- If the candidate names equipment using technical terms then you inform them that you don't know what that is eg bougie
- You are keen to help, but are unwilling to do anything beyond your skill set

ITU SHO:

- You are very junior and just started working in ITU
- You have never seen an ARDS patient and have never seen a prone patient
- You are keen but a bit worried that you do not understand what is going on

HILLO: 6