

COVID ARDS Proning:

Set-up:	
Lines/access:	RIJ CVC & left radial arterial line
Infusions:	Sedatives, muscle relaxant, noradrenaline, 1L 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:

1: 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, ETCO₂ 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

This Simulation Scenario has been written by Dr Louise Ma and formatted by Dr Line Grauslyte, the document has been produced by Dr Melia and approved by the FICM Education Sub-Committee. If you have any queries, please contact FICM via contact@ficm.ac.uk.



Info Sheet For Faculty

- Initial settings:
 - o SpO₂ 89% on FiO₂ 0.8
 - o Pinsp 25, PEEP 12, Vt 290
 - o EtCO₂ 5 kPa
 - o RR 22/min
 - o Bilateral air entry
 - o HR 65 bpm SR
 - o BP 110/60
- Progress to:
 - o SpO₂ 88% on FiO₂ 1.0
 - o Pinsp 25, PEEP 12, Vt 290
 - o EtCO₂ 5 kPa
 - o Bilateral air entry
 - o HR 65 bpm SR
 - o BP 110/60
- Progress to:
 - o SpO₂ 99% on FiO2 1.0 (once prone)
 - o Pinsp 25, PEEP 12, Vt 290
 - o EtCO₂ 5 kPa
 - o Bilateral air entry
 - o HR 65 bpm SR
 - o 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

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