Penn Medicine
Department of Emergency Medicine
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ED Awake Proning Protocol

AIM

Proning is an established process for intubated patients with ARDS who have severe hypoxemia. A subgroup of COVID-19 patient with mild to moderate respiratory failure requiring oxygen but not immediate intubation may also benefit from **awake proning**. This may avoid the need for intubation. The data on this is evolving and has currently only been studied in case series

INDICATIONS

- PUI/Confirmed COVID19
- Bilateral CXR infiltrates
- Hypoxia (<90%) despite supplemental oxygen (includes NC and HFNC)
  - Can use SpO_2/FiO_2 ratio <357
- Hemodynamic stability (normotension, HR <110 unless purely due to fever)
- Patient can move to prone position without assistance
- Ability to closely monitor patient (ideally 1:2 no less than 1:3 nursing ratio)

CONTRAINDICATIONS

- GCS <15
- $PaCO_2$>45
- Hemodynamically unstable
- Agitated behavior
- Pregnancy
- Morbid obesity (BMI >45)
- Chronic lung disease
- CXR infiltrates of cardiac origin
- Spinal instability
- Invasive devices e.g. chest tube

PRONING PROTOCOL

- Inform patient of potential benefits and risks (including of delayed intubation)
- Patient should be in a negative pressure room with continuous telemetry, IV access. Telemetry leads should be applied to the back.
- Allow patient to void
- Provide padding for pressure points (shoulders, hips, and ankles)
- Ensure IV lines and O2 supply are on a single side of the patient to prevent kinking
- Place bed rails up. Position bed flat or in reverse Trendelenburg
- Record vital signs prior to proning

- Instruct patient to roll onto their stomach, adjusting padding under pressure points
- Prone cycling can last up to 2 hours – longer if patient is tolerating well

MONITORING

- Continuous telemetry monitoring
- Check vitals/saturations q30 minutes
- **Signs of FAILURE – if occurs, move patient supine, elevate head end, and prepare to intubate**
  - Patient is unable to tolerate prone position
  - Patient has worsening hypoxia (<90%), work of breathing, or tachycardia
  - Patient has an increasing oxygen requirement to maintain saturations >90%