

MGH ECMO Protocol During the COVID-19 Pandemic

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ECMO ELIGIBILITY COVID ASSOCIATED RESPIRATORY FAILURE:

- All intubated patients should be screened daily for ECMO needs and Eligibility.
- ≥ 1 : PF Ratio 60-80, respiratory instability with prolonged desaturations, or elevated airway pressures.
- Proning Failure or inability to Prone.
- Approval by ECMO and/or ICU Directors.

ABSOLUTE CONTRAINDICATIONS COVID19:

- Age >60 for COVID19 Patients.
- Multisystem Organ Failure.
- Chronic Cardiac, Pulmonary or Hepatic Disease.
 - With exception of Asthma.
- Unknown Neurological status.
- Active Malignancy.
- ANC <1000
- ECPR

RELATIVE CONTRAINDICATIONS All:

- Age >65 for NON-COVID19 Patients.
- Immune Suppression.
- Chronic Renal Dysfunction.
- Secondary infections with MDR organisms.
- ECPR
- BMI >35

CANNULATION STRATEGIES, PER COVID CANNULATION PROTOCL:

- Cannulation to occur bedside in the ICU.
- Femoral/Jugular Cannulation to eliminate need for guided imaging.
- Sheaths should be placed early.

PANDEMIC RESOURCE UTILIZATION:

- Daily Assessment by ICU and ECMO teams regarding continued support.
- Resource Allocation will be guided by Hospital Incidence Command System (HICS)

References:

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