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MGH ECMO Protocol During the COVID19 Pandemic

ECMO ELIGIBILITY:
- All intubated patients should be screened daily for ECMO needs and Eligibility.
- PF Ratio 60-80, respiratory instability with prolonged desaturations, lung compliance <30
- Proning Failure or inability to Prone.
- Approval by ECMO and/or ICU Directors.

ABSOLUTE CONTRAINDICATIONS
- Significant Acute Organ failure other than Cardiopulmonary or Renal
- Chronic Cardiac, Pulmonary, Renal or Hepatic Disease.
- Unknown Neurological status.
- Active Malignancy.
- ANC <1000
- BMI > 40

RELATIVE CONTRAINDICATIONS:
- Age >70 for NON-COVID19
- Age >60 for COVID19 Patients.
- Immune Suppression.
- Chronic Cardiac, Pulmonary, Renal or Hepatic Disease.
- Secondary infections with MDR organisms.
- ECPR
- BMI >35 (requires vascular access sufficient for high flows)

CANNULATION STRATEGIES:
- 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:
Responding Authors: Yuval Raz, MD; Masaki Funamoto, MD; Kenneth Shelton, MD


8. Massachusetts General Hospital Treatment Guidance for Critically Ill Patients with COVID-19