COVID-19: Survival among Mechanically Ventilated Patients

Daniel W. Johnson, MD, FCCM
Division Chief and Fellowship Director, Critical Care Medicine Director, Cardiovascular ICU
Associate Medical Director, Biocontainment Unit
Associate Professor, Department of Anesthesiology
(Early) Seattle Data

- February 2020 Multicenter Case Series
- 9 of 18 COVID+ vented patients died
  - Majority had chronic illness
  - 2 deaths were SNF residents over 80 years old

- Compliance similar to other ARDS cohorts

PK Bhatraju et al.  NEJM  March 2020
Northwell Data – New York

- Case series 5700 patients in 12 hospitals March 1 to April 4
- Analyzed the 2634 patients who had discharged or died
  - NOTE: People alive in the hospital were not included in main analysis
- Media: 88% of vented patients die
- Vented patients (n=1151):
  - 24.5% had died
  - 3.3% discharged alive
  - 72.2% were alive in hospital

S Richardson et al. JAMA April 2020
(WAY too Early) UNMC Data

COVID+ Intubated and Vented (n=20)

- 20% Death
- 35% Alive w ET tube
- 30% Have Recovered
- 15% Trached

- Death = 4
- On vent, not trached = 7
- Recovered = 6
- On vent, trached = 3
UNMC Approach

- LTVV, PEEP as needed, proning
  - Timing of intubation same as approach to flu, other ARDS
- Modest fluid restriction
- No anti-viral, anti-malarial therapies outside of IRB-approved RCTs
- Compliance similar to other ARDS
MGH / BIDMC Data – March 2020

- MGH and BIDMC April 29 in AJRCCM
- All 66 COVID+ vented patients March 11-30
  - 85% of them had ARDS
- LTVV, consider proning P/F < 200
- Conservative fluids, Median PEEP = 10
- Compliance similar to other ARDS
- As of April 28:
  - 62% had successfully extubated
  - 21% underwent tracheostomy
  - 16% had died

D. Ziehr et al. AJRCCM. May 2020
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Discussion

- ARDS from COVID-19 is similar to ARDS from other viral pneumonias

- Mortality rates for vented patients still unknown

- Longer-term follow up is needed

- Updates on more recent data from Seattle, Boston, or New York?