Case Presentation: Management of COVID-19

Erica Lin, PGY6
Pulmonary & Critical Care Fellow, UCSD
Case Presentation

• 48 year-old male with HTN, DM, asthma, OSA
• Reported 1-week of chills, shortness of breath, cough
• Received azithromycin and hydroxychloroquine for COVID
Case Presentation

- Presented to OSH for worsening respiratory symptoms
- Initially on 6L O2
- Received Remdesivir, dexamethasone, and convalescent plasma
- Intermittently on BiPAP
- Transferred to UCSD
Case Presentation – Admission to ICU

T 97.7, HR 81, BP 144/81
SpO₂ 91 on NRB
Appeared comfortable in no significant respiratory distress,
Good air movement, No crackles or wheezing, Chronic venous stasis changes, 2+ peripheral edema

Basic laboratory studies, chest x-ray ordered

He was admitted to ICU on NRB
Case Presentation – Laboratory/Imaging Studies

Lactate 2.2
D-dimer 1026
ABG 7.48/43/51/30 on NRB
What would you do?

A. Let him ride
B. Change to HiFlo nasal cannula at 100% FiO2 and 60 L/min
C. Start BiPap at 100% FiO2 and 20/10
D. Intubate, paralyze and prone
Case Presentation

- Intubated with low tidal volume ventilation
- Paralyzed and proned
- Diuresed for conservative fluid balance
- Cannulated for VV ECMO
Chest x-ray – Progression throughout Hospitalization
Would you consider tracheostomy?

A. Last week (week 1 of intubation)
B. 2 weeks into mechanical ventilation
C. 3 weeks into mechanical ventilation
D. At time of placement on ECMO
E. Never
Case Presentation

- Ventilator-associated pneumonia
- Retroperitoneal bleed
- ICU-related delirium
- Oxygenator issues
- Bleeding from tracheostomy s/p cryotherapy
- Peripheral eosinophilia of unclear etiology
Case Presentation – Resolution

- Continuing with sweep challenges. May be decannulated early this week
- Mobilizing with physical and occupational therapy
ARDS

Low tidal volume ventilation

“Rescue” ECMO

Proning

Conservative Fluid Balance

+/− Paralysis

“Rescue” ECMO

Proning

Conservative Fluid Balance

+/− Paralysis
Expert Discussant:
Dr. Amy Bellinghausen Stewart