**PRESENTATION**

**NOTABLE SX**
- ~65-80% Cough
- ~45% Febrile initially
- ~15% URI Sx
- ~10% GI Sx

Acute worsening after early mild sx- often 5-10 days from initial symptoms, **respiratory deterioration can be precipitous.**

**HIGH RISK FOR SEVERE DISEASE**
- Age >55, high BMI, Asthma
- Comorbid diseases:
  - Pulmonary, cardiac, renal
  - Diabetes, HTN
  - Immunocompromise state

**LABS INDICATING SEVERE DISEASE**
- D-dimer > 1000
- CRP > 100
- Ferritin > 300
- Absolute lymphocyte count <0.8

**DIAGNOSTICS**

**DAILY LABS**
- CBC with diff (trend lymphocyte ct)
- CMP
- CPK
- D-dimer
- Ferritin
- CRP
- LDH
- Troponin
- EKG Once on admission, then PRN to evaluate QTc if on specific meds

**ONE TIME TEST FOR ALL PATIENTS**
- Respiratory Viral PCR panel
- HBV, HCV, HIV testing
- SARS-CoV2 (if not already sent)

**RESPIRATORY FAILURE**

**CONSIDER EARLY INTUBATION IN ICU**
- **HHFNC for select patients must be in NPR**

**WARNING SIGNS:** INC FiO2, DEC SaO2, CXR WORSE

**LUNG PROTECTIVE VENTILATION**
- Vt 6 ml/kg predicted body weight
- Plateau pressure <30 when possible
- Driving pressure (Pplat-PEEP) <15 when possible
- Target SaO2 90-96%, PaO2 > 60
- Starting PEEP 10 cmH2O – High PEEP strategy

**CONSERVATIVE FLUID STRATEGY**
- Diuresis, goal net negative 500 to 1000 cc daily
  - NO maintenance fluids

**HIGH PEEP TITRATION**
- Best PEEP by compliance or ARDSnet HIGH PEEP table

**PRONE POSITION**
- Early if hypoxemia; P/F Ratio ≤ 150 (PROSEVA) or < 100

**RESCUE THERAPIES**
- NMB for vent dysynchrony, not routine
- Inhaled NO 10 ppm; Recruitment maneuvers

**IF WORSENING**
- ECMO CONSULT
  - If worsening hypoxemia
  - EOLIA criteria:
    - P/F < 50, FiO2 > 0.8, 3 hrs
    - P/F < 80, FiO2 > 0.8, 6 hrs

**DAILY QUALITY BUNDLE**
- Daily SAT/SBT when appropriate
- Extubate in NPR
- If HHFNC, stay in NPR
- ABCDE bundle

**HEMODYNAMICS**
- Norepinephrine first vasopressor
- **IF WORSENING:**
  - Consider myocarditis/cardiogenic shock
  - Obtain POCUS echo. EKG, trop. scV02 (formal TTE if high concern)
  - Consider possible Pulmonary Embolus

**CHANGE TO USUAL CARE**
- NO ROUTINE DAILY CXR
- MINIMIZE staff contact in room
- BUNDLE bedside procedures
- HIGH THRESHOLD for bronchoscopy
- HIGH THRESHOLD for travel
- Appropriate guideline-based isolation for aerosol generating procedures:
  - Bronchoscopy
  - Intubation/extubation
  - AVOID nebs, prefer MDIs

**THERAPEUTICS**

**ALL ICU ADMISSIONS**
- Empiric antibiotics for CAP/HAP
- WITH ID GUIDANCE, consider:
  - Hydroxychloroquine
  - Anti-IL 6 therapy
  - Remdesivir, clinical trial

**IMMUNE MODULATION**
- Immunomodulatory therapies with ID consultation & ICU attending
- Consider Steroids for ARDS:
  - Methylprednisolone (HR, 0.38; 95%CI, 0.20-0.72, Wu et al, JAMA Intern Med, March
- Steroids for septic shock: Hydrocortisone 200 mg daily (50 mg q6h vs. 8.3mg/hr drip)
Michigan Critical Care Collaborative Network

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Author(s): Michigan Medicine ICU Directors

Institution or Source: Michigan Medicine

Notes/Summary

Adapted from Massachusetts General Hospital document.