COVID-19 CLINICAL ONE-PAGER
Created March 14, 2020

PRECAUTIONS
• Immediately isolate patients +/- neg pressure room
• Droplet + contact precautions for most
• Airborne precautions if airway procedures → use N95
  Donning: wash→gown→mask/goggles→gloves
  Doffing: gloves→gown→wash→mask/goggles→wash

COURSE AND PRESENTATION
• Case definition: fever or resp sx + exposure w/in 14 days
• 81% of patients will have very mild illness course
• Incubation period typically 4 days, up to 14 days
• Day ~4: common symptoms at onset: fever (77–98%), cough (46%–82%), fatigue (11–52%), dyspnea (3-31%)
  GI symptoms (10%)
• Day ~6: dyspnea
• Day ~8: decompensation
• Day ~10: ventilatory support

HISTORY & PHYSICAL
• Inquire about goals of care, exposures/gatherings
  Inquire early – patient may decompensate
• Respiratory and constitutional symptoms
• Vitals, cardio+resp exam, volume status, perfusion
  Shock at admission is infreq – consider alt dx
• Sick pts have ARDS picture: fever, ↓BP, ↑HR, ↑RR, ↓O2, dyspnea, abn breath sounds
• High risk comorbidities:
  Cardiovascular or respiratory disease, chronic organ disease, diabetes, age >60, immunocompromised state
• Ddx: alt viral infxn, pneumonia, CHF, COPD, asthma, ect...
• Complications: cardiomyopathy, sepsis, DIC, vent related

MANAGEMENT FOR WELL PATIENTS
• Isolation 14d +/- NP swab per local guideline (~70% sens)
• Acetaminophen for fever and return precautions

WORKUP FOR UNWELL PATIENTS
• NP swab for COVID, flu, RSV but keep ddx broad
  NP swab have low sens—CXR if suspicious
• CBC- expect ↓lymphocytosis, ↓PLT
• Troponins- often demand ischemia – check ECG
• CRP- ↑’s w/ disease severity, consider alt dx if normal
• ↑LFTs, ↑BUN/Cr, if ill consider DIC labs
• Blood + urine cultures- only if suspected bacterial infxn
• Procalc- if available & ↑ consider bacterial pneumonia
• CXR +/- lung POCUS (B-lines), CT unnecessary in most

TREATMENT
• Respiratory support is mainstay of treatment
• VERY conservative fluids- avoid worsening pulm edema
• Consider empiric abx for CAP pending investigations
• Likely no role for steroids or Tamiflu
• Antivirals investigational at some sites– consult ID
• Cardiomyopathy→ cardiogenic shock may be late feature
  Echo for EF, consult cardiology early, treat CHF
  Vasopressors and arrhythmics may be needed

RESPIRATORY SUPPORT OPTIONS
• Start with low flow nasal→face mask→venturi→NRB
• Avoid HiFlow, BiPAP, nebs, suctioning d/t aerosolization
  Use MDI instead of nebulizers where possible
• Intubate early- pref no bag RSI, vent w/ARDSnet protocol
  Negative pressure room with full PPE + N95
  Full dose paralytic to prevent cough
  Preox w/ fitted mask+viral filter+PEEP valve
  Minimize bagging– if critical 2 hand seal+viral filter
  Video laryngoscopy by experienced provider
  Prone positioning may help refractory cases

IMAGING FINDINGS
CXR: patchy ground glass opacities

NP SWAB TECHNIQUE
• Tilt pt head slightly back, insert swab straight in, not up
• Once resistance is met, rotate swab for 10-15 seconds

SOURCES:
• https://emcrit.org/lbcc/covid19/
• https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance
• https://jamanetwork.com/journals/jama/fullarticle/2762996

Continue to follow local guidelines and procedures, this summary of early evolving literature should not be construed as a treatment guideline or medical advice

Updated versions at www.bit.ly/covidonepager