# QUICK GUIDE FOR MANAGEMENT OF CRITICALLY ILL PATIENTS WITH COVID19: ICU CARE

**TRANSFER TO THE ICU**: Logistics to be aware of for the covid patient

- Patient should be wheeled in ICU bed to the ICU to facilitate ease of transfer into ICU room (when possible)
- Patient to wear: surgical mask + clean gown + clean sheet
- 2 ICU RNs in full PPE will accompany patient for transfer to ICU with 2 security guards in N95 mask

**BEDSIDE PROCEDURES:** Special considerations for the covid patient

- See full ICU guidelines for step by step instruction on how to do sterile procedure with strict isolation precautions
- Post intubation CXR should occur prior to bedside procedures
- Central venous catheters: prefer left IJ (save right side for RRT)
- Bronchoscopy: minimize as much as possible, if pulmonary toilet try albuterol neb followed by EITHER dornase alfa neb daily (avoid if blood in secretions) OR hypertonic saline

**FLUIDS:** conservative strategy with LR preferred over NS

- asses fluid responsiveness with 250-500cc bolus (avoid reflex 30cc/kg resuscitation)
- Target CVP 4-8 and EVEN daily fluid balance
- Switch to vasopressors EARLY
- Assess fluid responsiveness BEFORE bolus for low UOP/BP

**STEROIDS:** not recommended in the covid patient

- Avoid empiric steroids unless other indication for steroids:
  - asthma or COPD exacerbation prednisone 40mg daily and stop once resistance improves on measured pulmonary mechanics
  - adrenal insufficiency
  - primary oncology recommendation

**ONCOLOGIC PATIENTS:** *page primary oncologist on admission*
Be aware of NEUTROPENIA (ANC <500)

- Cover for pseudomonas (cephalosporin, zosyn, carbapenem)
- Cover for MRSA if v. sick or (if possible) line infection
- Consider antifungal if fever after 3d of abx, check fungal markers (d/w ID and/or oncolocy)

**SHOCK:** in covid patient think about distributive vs. cardiogenic

- **DISTRIBUTIVE SHOCK**: (bacterial superinfection, ventilator associated PNA, catheter associated infection urinary /CVC)
  - WORK UP → CBC w/ diff + procal + Blood cx + UA + tracheal aspirate gram stain and culture (if possible)
- **CARDIOGENIC SHOCK**: (myocarditis-like syndrome with left sided heart failure, ACS, stress or septic cardiomyopathy)
  - WORK UP → ECG + troponin + NT-proBNP + LFTs + central venous O2 sat (CVO2)

**MANAGEMENT OF CARDIOGENIC SHOCK (CS) w/ no PA line**
****ALWAYS CONSULT CARDIOLOGY****
High probability CS if elevated NT-ProBNP, CVO2 <60%, +/- bedside ultrasound w LV function down (additionally: formal TTE if possible)

- **Start NOREPINEPHRINE drip upfront titrate to MAP 65-75**
- **Diuretic therapy** if CVP >14, titrate to goal CVP 6-14 + monitor urine output (response to therapy)
- **Inotropic support** with dobutamine drip if MAP>65, start at 2mcg/kg/min up-titrate by 1-2 mcg/kg/min every 30-60min for goal CVO2 >60. Consider alternate strategy at 5, max dose 10 mcg/kg/min. (Beware of side effect: tachyarrhythmias)
- Check **daily LFTs (**for hepatic congestion)
- Serial **lactate and CVO2** both q4-6hrs
- **Mechanical circulatory support** → consider if CVO2 <60% and/or Lactate > 4 at dobutamine 5 mcg/kg/min

Version 3.20.2020
To check for the most up to date recommendations, please visit the full manual or use the QR code here →
For urgent questions please consult the ICU triage pager (#39999)

SCAN ME

BRIGHAM HEALTH
BWH BRIGHAM AND WOMEN'S HOSPITAL