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**PRESENTATION**

**NOTABLE SX - SAME AS NON-PREGNANT**
- ~65-80% Cough
- ~45% Febrile initially
- ~15% URI Sx
- ~10% GI Sx
- Anosmia
- Acute worsening after early mild sx

**INCREASED RISK FOR SEVERE DZ**
- Comorbid diseases:
  - Cardiac, pulm, renal
  - Diabetes, HTN, BMI >30
  - Immunocompromise

**LABS INDICATING SEVERE DZ**
- LDH >245, CPK 2x normal, CRP >100
- Abs lymphocyte count <0.8

**PREGNANCY CONSIDERATIONS**
- Tachycardia over 120bpm is abnormal
- Tachypnea over 18rpm is abnormal
- Elevated D-dimer expected, >2400 abnl
- Low HCO3 18-22 is normal
- Higher risk of intubation/ICU/death

**DIAGNOSTICS**

**DAILY LABS**
- CBC with diff (trend lymphocyte ct)
- CMP, in particular LFT
- Consider development of preeclampsia or HELLP syndrome, send spot urine protein:creatinine ratio if Cr elevated
- CPK/CRP (first week) /LDH (if elevated)

**MONITOR FOR WORSENING DISEASE OR DRUG TOXICITY PRN**
- Ferritin/ESR (if sHLH)  •  PT/PTT/INR
- EKG/Troponin • Lactate (<2)
- Monitor fetal status if increased O2 req

**ONE TIME TEST FOR ALL PTS**
- Tracheal aspirate if intubated
- Additional tests for trial enrollment prn
- Additional testing per ID guidance

**RESPIRATORY FAILURE**

**Transfer to ICU for HFNC vs Intubation**
Consider RICU consult, Anticipate DIFFICULT intubation

**WARNING SIGNS:** inc FiO2, dec SaO2, CXR WORSE

**LUNG PROTECTIVE VENTILATION**
- Vt 40% greater in pregnancy than 4-6 ml/kg PBW
- Plateau pressure <30
- Driving pressure (Pplat-PEEP) <15
- Target SaO2 >93-95%, PaO2>70
- Starting PEEP 8-10 cmH20

**CONSERVATIVE FLUID STRATEGY**
- Post resuscitation: NO or limited maintenance fluids
- Only diuresis if evidence of pulmonary edema

**PEEP TITRATION**
- ARDSnet low PEEP table
- Best PEEP considered w/ ICU attending input

**PRONE - ACCEPTABLE IN PREGNANCY**
- Early if cont. hypoxemia (P:F<150) or elevated driving/plateau pressure
- Supine with left lateral uterine displacement –qAM

**ADDITIONAL THERAPIES**
- Paralytics for vent dysynchrony, not routine
- Inhaled NO eligible (no epoprostenol)

**ECMO CONSULT**
if continued hypoxemia or elevated airway pressures

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**PATIENCE**
Anticipate possible prolonged intubation

**HEMODYNAMICS**
- Norepinephrine first choice pressor
- MAP 60-65 with BP < 160/110
- CO mean 6.2 L/min, 43% greater
- SVR decreased 21%, CVP unchanged
- IF WORSENING:
  - ? myocarditis/cardiogenic shock
  - Obtain POCUS, EKG, ? TTE
  - ? Intestinal ischemia, MRI preferred

**USUAL CARE**
- **Empiric abx per usual approach**
- Sedation PRN vent sychrony
- Daily SAT/SBT when appropriate
- ABCDEF Bundle
- Unfractionated heparin for VTE pp

**CHANGE TO USUAL CARE**
- CXR safe prn with uterine shielding
- **MINIMIZE** staff contact in room
- **HIGH THRESHOLD** for bronchoscopy
- **HIGH THRESHOLD** to travel
- **BUNDLE** bedside procedures
- **AVOID** nebs, prefer MDIs
- **Appropriate isolation** for aerosol generating procedures
- **Maintain** left lat uterine displacement
- Normal ABG should demonstrate compensated respiratory alkalosis:
  - pH 7.40–7.44
  - PaCO2 27–32mmHg
  - PaO2 72–104mmHg
  - SaO2 95–100%

**THERAPEUTICS**
- Delivery may improve maternal status
- Remdesivir
- *Hydrocortisone, Methylprednisolone or Prednisone favored for steroids as Dexamethasone crosses the placenta*
  - *May consider Dexamethasone for the first 48 hours for fetal lung maturity*
- Avoid NSAIDS
- Novel Rx trial or compassionate use

**PAGER NUMBERS**
- ICU CONSULT:26955 ECMO:29151 ID CONSULT: 16136 MFM:17977