

Medical Treatment Guidance for Pregnant Patients with Suspected or Confirmed COVID Admitted for Non-Obstetric Indication:

- See COVID Portal for patient placement, PPE, and precaution types

GENERAL GUIDANCE

- The best therapy for the fetus at any gestational age is to take care of the mother.
- Pregnant women are more susceptible to viral respiratory infection, but specific information about COVID-19 infection and its natural history in pregnancy is lacking.
- Pregnant women infected with respiratory viruses have significantly more morbidity than their non-pregnant counterparts.
- Limit care team as much as possible. Avoid exposure to multiple departments whenever possible

LABORATORY/IMAGING/TESTING:

- Indicated imaging studies (ultrasound, CT, MRI) can be done, but should avoid transporting to radiology due to contamination risk. Consider bedside imaging.
- Avoid gadolinium for MRI as it is concentrated in the fetal compartment.
- If CT, fluoro, or other procedures involving ionizing radiation are required, shielding of the maternal pelvis and minimizing radiation dosage so that the required clinical information is obtained but unnecessary radiation to the fetus is avoided. Fetal monitoring is not indicated in the pre-viable pregnancy.

MANAGEMENT AND TREATMENT

All standard treatments and interventions for COVID-19 infection are unchanged by pregnancy with the following considerations:

- Avoid excessive hydration and IV fluids.
 - Do NOT treat preterm contractions or preterm labor with boluses of IV fluid or beta-mimetics or calcium channel blockers as they increase the risk for pulmonary edema. Indocin and NSAIDs are relatively contraindicated in women with COVID-19 infection.
- Steroids may increase viral replication.
 - Careful consideration of (maternal) risk vs. (fetal) benefit prior to administration of betamethasone in the setting of preterm labor in COVID-19. Consider EGA and likelihood of preterm delivery.
- Gastric emptying is delayed, and patients should always be presumed to have a full stomach.
- Positive pressure ventilation is to be avoided as it aerosolizes, See COVID Portal for patient placement, PPE, and precaution types.
- Determine *if* a patient requires bronchodilator therapy for bronchospasm. For suspected or COVID-19 positive patients, the recommendation is to use albuterol in MDI, with a spacer in order to conserve supply in a canister reuse program. Nebulized medications can still be used, See COVID Portal for patient placement, PPE, and precaution types.
- Due to the potential for rapid respiratory decompensation, consider early intubation. Intubation of the pregnant patient should defer to the most qualified intubator.
 - Avoid hypoxia and desaturation which can occur much more quickly during intubation than in the non-pregnant state. Maintain Sa O₂ at 93% or greater.
- The normal ranges for many lab values change during pregnancy.
 - Pulmonary mechanics change and patients third-space, making pregnant women more susceptible to ARDS.
- General anesthesia as well as local anesthetics and paralytics at standard doses can be safely administered.
- If surgery, procedures, or immobilization is planned, avoid placing the patient in the supine position due to uterine compression of the vena cava with decreased venous return resulting in decreased cardiac output and hypotension.
 - The patient should be managed with a wedge under her hip to displace the uterus and avoid supine hypotension.
- If antibiotics are indicated, penicillins, expanded spectrum penicillins, cephalosporins, and aminoglycosides can be used during pregnancy. GFR is increased in pregnancy. Aminoglycoside levels should be followed. Quinolones should be avoided.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html>

<https://www.sfm.org/covid19>