UNIVERSITY of WASHINGTON

COVID & Pregnancy

Vaccine Considerations and Management Recommendations after COVID-19 Illness

Division of Maternal Fetal Medicine

September 2021

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INTRODUCTION

The Centers for Disease Control, the American College of OB/GYN, the Society for Maternal-Fetal Medicine and the American College of Nurse Midwives have all recommended COVID-19 vaccination during pregnancy and lactation.

Please find a summary regarding **support of COVID-19 vaccination during pregnancy and lactation** including a brief synopsis of the rationale for vaccination. We hope these talking points will assist patient counseling regarding receipt of COVID-19 vaccination during pregnancy or lactation.

Some patients request a "medical exemption" from vaccination. The University of Washington Maternal-Fetal Medicine Division does not support providing medical exemptions for pregnancy alone.

Please also find a summary regarding **recommendations for pregnancy management after COVID-19 illness**.

A consistent message from all obstetrical providers is important in providing safe maternal, fetal and neonatal care. We hope you find this helpful in these unprecedented times.

COVID-19 Vaccination in Pregnancy and Lactation Talk Points

ENDORSEMENTS for COVID-19 Vaccination in Pregnancy and Lactation

Centers for Disease Control[1]
American College of Obstetricians and Gynecologists[2]
Society of Maternal-Fetal Medicine[3]
American College of Nurse Midwives

RISKS of COVID-19 Infection in Pregnancy

- 3-5 times more likely to require ICU care and/or mechanical ventilation[4,5]
- 1.6 times more likely to develop preeclampsia[4,5,6,7]
- 1.5 times more likely to have a preterm birth[4]
- Increased risks of maternal death, VTE, and Cesarean delivery[4,5]

VACCINES (Pfizer-BioNTech BNT 162b2, Moderna mRNA 1273)

- Highly efficacious (> 90%)
- Efficacious in preventing severe disease and hospitalization with Delta variant
- Excellent transplacental transfer of IgG antibody, potentially protecting neonate from early COVID-19 infection[8,9]
- No increase in local reactions (injection site pain) and decrease in systemic reactions (headache, fever, chills, myalgias)[10]

VACCINE SAFETY in Pregnancy

- More than 150,000 patients have received vaccine during pregnancy, with > 5,000 in CDC registry[1]
- No increase in adverse pregnancy outcomes including preterm birth, small for gestational age neonates, or miscarriages[11]

Excellent resource for Frequently Asked Questions developed by UW can be found at:

https://www.uwmedicine.org/coronavirus/vaccine

MANAGEMENT RECOMMENDATIONS & CONSIDERATIONS

DISCLAIMER*: There are no formal, published recommendations regarding management for on-going pregnancy after COVID-19 illness. These recommendations reflect general consensus among the Maternal Fetal Medicine division at University of Washington. The recommendations are subject to change and modification. All care should be individualized based on the specifics of each patient and clinical course.*

RESOLVED MILD (NON-HOSPITALIZED) COVID INFECTION, ON-GOING PREGNANCY

1. Assess serial growth ultrasounds approximately every 4-6 weeks
2. Low threshold for weekly NST starting at 32-34 weeks
3. Otherwise, routine prenatal care with specific attention to blood pressure surveillance. Consider home blood pressure monitoring if patient is not presenting for in-person prenatal visits.
4. Reserve IOL and cesarean delivery for usual OB indications; resolved mild COVID infection in and of itself not an indication for IOL nor CD
5. Delivery location does not need to change based on prior COVID-19 illness alone.

RESOLVED MODERATE-TO-SEVERE (HOSPITALIZED > 24 hrs, REQUIRING SUPPLEMENTAL O2 > 24 hrs) COVID INFECTION, ON-GOING PREGNANCY, NOW ASYMPTOMATIC.

Given associated increased risk of complications, recommend:

1. Maternal-Fetal Medicine outpatient consult for post-COVID follow-up. The MFM provider will complete a comprehensive evaluation of the maternal and fetal status as well as provide recommendations for antenatal fetal monitoring plan, including need for additional fetal surveillance, based on individual patient risk factors.
2. Assess serial growth ultrasounds approximately every 4-6 weeks and additional ultrasound surveillance as clinically indicated
3. Consider IOL at 39 weeks, earlier if clinically indicated. However, if COVID resolution designation falls near 39 weeks gestational age consider delaying for up to one week if all other maternal-fetal surveillance is reassuring

4. Specific attention to blood pressure surveillance. Consider home blood pressure monitoring if patient is not presenting for in-person prenatal visits.
5. Reserve CD for usual OB indications and/or medical indication for CD due to sequelae from COVID illness.
6. Delivery location does not need to change based on history of COVID-19 infection alone if patient meets criteria for intended location at time of delivery (i.e maternal diagnosis/needs, gestational age at delivery, etc).

RESOLVED MODERATE-TO-SEVERE (HOSPITALIZED > 24 hrs, REQUIRING SUPPLEMENTAL O2 > 24 hrs) COVID INFECTION, ON-GOING PREGNANCY, WITH RESIDUAL SYMPTOMS AND/OR NEED OF SUPPORT

Example: persistent need for home supplemental oxygen

Given associated increased risk of complications, recommend:

1. Maternal-Fetal Medicine outpatient consult for post-COVID follow-up. The MFM provider will complete a comprehensive evaluation of the maternal and fetal status as well as provide recommendations for antenatal fetal monitoring plan, including need for additional fetal surveillance, based on individual patient risk factors.
2. Assess serial growth ultrasounds approximately every 3-4 weeks and additional ultrasound surveillance as clinically indicated
3. Consider IOL at 39 weeks; earlier if clinically indicated. However, if COVID resolution designation falls near 39 weeks gestational age consider delaying for up to one week if all other maternal-fetal surveillance is reassuring
4. Specific attention to blood pressure surveillance. Consider home blood pressure monitoring if patient not presenting for in-person prenatal visits.
6. Reserve CD for usual OB indications and/or medical indication for CD due to sequelae from COVID illness.
7. Delivery location does not need to change based on COVID diagnosis alone if patient meets criteria for intended location at time of delivery (i.e maternal diagnosis/needs, gestational age at delivery, etc). MFM will further clarify delivery location recommendations regarding possible need for ICU care intrapartum/postpartum.

Resource for testing, protocols and treatment guidelines developed by UW can be found at:

https://covid-19.uwmedicine.org/Pages/default.aspx

Notable Highlights regarding Pregnancy:

1. **Monoclonal antibody therapy may be considered** on a case-by-case basis for pregnant patients with symptomatic COVID-19 illness at high risk for progression to severe COVID-19 disease after discussion of potential benefits and unknown risks. Transplacental transfer of antibodies is likely to occur, but no data exists estimating potential treatment benefit or harm to the fetus.
2. **Remdesivir** should not be withheld from pregnant patients if it is otherwise indicated.
3. If **Dexamethasone** is indicated for COVID treatment and depending on gestational age, consider increased dosing for fetal lung maturity (4 doses of 6 mg intramuscularly every 12 hours) followed by dexamethasone 6 mg daily for 10 days.[12]

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