CONSIDERATIONS FOR OBSTETRIC ANESTHESIA CARE RELATED TO COVID-19

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General recommendations for management of women with suspected/confirmed COVID19:

- For confirmed COVID-19, follow the OR COVID-19 protocol regarding PPE precautions.
- Admit to a negative pressure room if available, and limit the number of care providers to the strict minimum.
- Pre-anesthesia assessment via phone/video/EPIC
- Video-assisted electronic multidisciplinary discussions
- Maintain surgical mask on patient at ALL TIMES

1. For labor and delivery:

- No increased aerosolization risk during labor.
- Prior to entering labor and delivery room, all healthcare workers should implement droplet and contact precautions with eye protection (gown, gloves, mask, face shield).
- A COVID-19 diagnosis itself is NOT a contraindication for neuraxial analgesia/ anesthesia.
- Encourage early neuraxial labor analgesia as it may reduce the need for general anesthesia for emergent cesarean delivery.
- Check the platelet count before insertion of epidural or spinal, and possibly before removal of the epidural catheter (Approximately one third of patients in a case series from Wuhan developed a platelet count <150). Platelet count 80-100 is an acceptable range.

2. For cesarean delivery:

- Consider transfer arrangements for a woman who needs cesarean delivery i.e. the route to and from the isolation ward or ICU should be cleared by security.
- Provide spinal or epidural anesthesia as required.
- Avoid general anesthesia (and thus airway manipulation) unless necessary for standard indications.
- Consider plans for the management of failed neuraxial blockade.
- Donning and doffing takes time. Avoid crash situations by anticipating needs (response time will be delayed).
- Avoid emergent cesarean deliveries as much a possible – proactive communication with obstetrical and nursing teams.

- Assign the most experienced anesthesia provider whenever possible for procedures (neuraxial, intubation).
- **Prior to entering the operating room**, regardless of the type of anesthesia;
    - Anesthesia providers and necessary assistants should implement droplet and contact precautions with eye protection (gown, gloves, mask, face shield)
    - Use donning and doffing checklists and trained observers. Double glove for ALL procedures and replace the outer layer of gloves immediately after intubation.

- **If general anesthesia indicated** – All personnel in the OR at the time of intubation should wear an N95. (airborne PPE) – Minimize to only essential personnel during intubation – use your best judgement, while making sure you have some assistance readily available.
    - Pre-oxygenation should occur with a circuit extension and HEPA filter at the patient side of the circuit.
    - Use a closed suction system (if available).
    - Intubation should occur via a means to maximize success on first attempt and minimize any need to provide bag-mask ventilation (video-laryngoscope).
    - Extubation is equally, if not more of a significant risk (Extubation in the OR to nasal cannula or O_2 mask with low flow).
    - Maintain surgical mask on patient.

Additional Recommendations:

- Some experts have suggested avoiding the use of NSAIDs for symptoms suggestive of COVID infection, however this is controversial and robust data is lacking. It is unknown if the treatment of postpartum pain with NSAIDs will worsen the trajectory of COVID positive patients. NSAIDs can likely continue to be used safely in asymptomatic patients. Discuss it with the Obstetric team.
- Antiemetics should be administered to prevent vomiting in patients undergoing cesarean delivery. However, due to potential risks of steroids in the setting of COVID infection, consider avoiding the use of dexamethasone for PONV prophylaxis in COVID positive patients.

References:

Considerations for obstetric anesthesia care related to covid-19. SOAP_COVID-19_Obstetric_Anesthesia_Care_032320
https://soap.org/wp-content/uploads/2020/03/SOAP_COVID-19_Infographic_032620.pdf

DURING LABOR & DELIVERY

(for suspected or confirmed COVID-19+)

- Admit patient to negative pressure room, if available
- Surgical mask for patient at ALL TIMES
- PPE for direct patient care (Gloves, Gown, Mask, Face shield)
- Pre-anesthesia assessment via phone/video
- Video-assisted electronic multidisciplinary discussions
- Encourage early neuraxial labor analgesia
- Minimize crash cesareans
- Response time will be delayed

DURING NEURAXIAL PLACEMENT

(for suspected or confirmed COVID-19+)

COVID-19 in itself NOT a contraindication for neuraxial analgesia/anesthesia

Experienced provider

PPE

DROPLET/CONTACT PRECAUTION

(Gloves, gown, face-shield, mask)

If confirmed COVID-19+, AIRBORNE PRECAUTION

(N95 or PAPR)

DURING CESAREAN DELIVERY

(for suspected or confirmed COVID-19+)

Activate back-up coverage for L&D

Identify a runner, to be stationed outside OR, who will provide help/supplies

Minimize number of staff per case

Anesthesia providers and assistants should implement DROPLET/CONTACT PRECAUTION

If confirmed COVID-19+, AIRBORNE PRECAUTION (N95 or PAPR)

Use donning/doffing checklists under direct observation

DURING INDUCTION & MAINTENANCE OF GENERAL ANESTHESIA

(for suspected or confirmed COVID-19+)

Minimize personnel in OR for

induction – only essential staff

PPE for personnel within 6 feet

During intubation/extubation

AIRBORNE PROTECTION

(Gloves, gown, N95 with face shield

or PAPR)

Ensure HEPA filter between patient and anesthesia circuit
Pre-oxygenation: 100% O_2
RSI
Avoid positive pressure bag-mask ventilation
Use video-laryngoscopy
Extubation in the OR to nasal cannula or O_2 mask with low flow
Maintain surgical mask on patient