



Interim Considerations for Obstetric Anesthesia Care related to COVID19

This is interim guidance based on expert opinion and published recommendations from the WHO and CDC.

The understanding of this virus is rapidly evolving. Please consult CDC and WHO guidelines for healthcare workers for up-to-date recommendations.

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Considerations for L&D

Implement pre-hospital screening:

- For elective procedures (e.g. planned cesarean delivery, elective induction of labor, cerclage); patients should be phoned the night before to screen for symptoms consistent with COVID. Screening of the planned support person(s) should be included in this call.

Staff, training & equipment

- Plan and minimize who will be in the room to care for the COVID19 patient during labor and at delivery and cesarean delivery. Log all staff that goes in and out of the room.
- Plan with the NICU team for separation of the infant to prevent maternal-infant transmission.
- Simulate scenarios for the care of a COVID19 patient, including the donning and doffing of PPE, transport to the OR, and patient arriving on L&D with symptoms concerning for COVID19.
- Create COVID19 kits with all equipment including drugs for labor analgesia and cesarean delivery that would minimize the traffic and would avoid contaminating drug dispensing machines in an OR setting.
- Limit visitors/ support people for suspected and confirmed COVID19 patients per hospital policy.

OB Anesthesia specific considerations:

These general recommendations follow the APSF (Anesthesia Patient Safety Foundation) guidelines for management of women who tested positive for COVID19 or who are persons under investigation (PUI).

1. Admit to isolation room, preferably a negative pressure room, and limit the number of care providers to the strict minimum.
2. ALL healthcare workers should implement droplet and contact precautions with eye protection upon entering delivery room (gown, gloves, mask, face shield)
3. Donning and doffing takes time. Avoid crash situations by anticipating needs.
 - Early epidural analgesia may reduce the need for general anesthesia for emergent cesarean delivery.
 - A COVID19 diagnosis itself is NOT considered a contraindication for neuraxial anesthesia.
 - Avoid emergent cesarean deliveries as much as possible - proactive communication with obstetrical and nursing teams. For respiratory distress intubate early using appropriate PPE.
 - Assign the most experienced anesthesia provider whenever possible for procedures (neuraxial, intubation)

- Consider minimizing use of trainees in direct care of COVID19 patients. Minimize the number of personnel in the room.
4. 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 and ideally airborne-precautions (gown, gloves, and ideally N95 with face shield or PAPR)-
 - Use donning and doffing check lists and trained observers. Double glove for ALL procedures and replace the outer layer of gloves after intubation.
 5. If GA 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; minimize personnel, utilize N95/PAPR and PPE precautions. If proceeding with extubation at the end of case, extubate in the OR, keep PPE (PAPR/N95) on until after extubation. Consider transporting intubated to a negative pressure room (e.g. ICU) for emergence/ extubation.
 6. In accordance with the rational use guidance issued by the WHO, hospitals are recommending N95's only for special procedures, e.g. aerosolizing procedures such as intubations. Institutions may have different institutional guidelines, which should be followed for don/doff.
 7. Since the care of a COVID19 patient, including the time for donning and doffing, is time intensive, additional staffing may be needed, and back-up strategies may need to be developed.
 8. **There is currently insufficient information about the cleaning, filtering, and potential aerosolization of nitrous oxide in labor analgesia systems in the setting of COVID-19. As such, individual labor and delivery units should discuss the relative risks and benefits and consider suspending use.**
 9. 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+ patients. NSAIDs can likely continue to be used safely in asymptomatic patients.
 10. 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 PUI/COVID+ patients.

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Useful resources & references

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12. Emergency Caesarean delivery in a patient with confirmed coronavirus disease 2019 under spinal anaesthesia. [https://bjanaesthesia.org/article/S0007-0912\(20\)30131-8/pdf](https://bjanaesthesia.org/article/S0007-0912(20)30131-8/pdf).
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