

Admission Guidelines for Pregnant Patients to CCTC

NOTE: Care of the critically ill pregnant patient requires a multidisciplinary approach with coordination of care plans between the critical care team, the obstetrical care team and the obstetrical anesthesia care team. This will require dialogue between care teams to synchronize management plans. This document complements the admission checklist.

With the recent move of neonatal to Victoria Hospital, these protocols are under review and subject to change. Please ensure that you obtain guidelines from this website to ensure the most recent version.

If you have any questions or concerns, please page Brenda Morgan at 19914. A checklist of steps to take is available on the "What's New Page" of the CCTC Website.

Upon admission of a pregnant patient to CCTC, initiate the following:

1. **Cohort** all pregnant patients in the same bay to facilitate sharing of emergency equipment and facilitate Obstetrical Care Unit (OBCU) support.
2. **Avoid adjacent placement or doubling of ARO positive patients.** Ideally, admit a woman who is pregnant with a viable fetus to a room with an empty adjacent room. This allows the neonatal resuscitation equipment to be maintained in a room nearby instead of the patient's room, and provides more space in the event that neonatal resuscitation becomes necessary.
3. **Maintain Uterine Displacement at all Times:**

Nurse all pregnant patients in the left uterine displacement position (with wedge under the right hip, patient tilted toward left side). This is also important during CPR.

Pregnant patients can become very hypotensive in the supine position due to IVC and aortic compression by the gravid uterus.

4. Notify Obstetrics (Page the staff obstetrician or admitting obstetrician):

- a. To assess maternal and fetal health and risk
- b. To direct prenatal and perinatal care
- c. To determine monitoring requirements
- d. To work in collaboration with the critical care team and obstetrical anesthesia care team to provide quality care of the critically ill maternity patient

5. Notify the Charge Nurse OBCU: Extension 58168, Pager 14899:

- a. In collaboration with Obstetrics and CCTC, and OBCU nurses will provide fetal monitoring as required. This could range from being available for consultation on an "as needed basis" for first trimester pregnancies, to invasive maternal and fetal monitoring. A plan for support will be developed at the time of admission and modified throughout the admission as required.

Nancy Watts, Clinical Nurse Specialist, Women's Health and Perinatal Care is available on pager (Pager #17056), Monday-Friday.

- b. Notification ensures the OBCU is aware of the status of any admitted patients.

6. **Notify PCCU Charge Nurse (pager 15933) if gestational age is > 23 weeks or deemed viable by obstetrician:**
 - a. PCCU will provide emergency equipment if the fetus is deemed viable.
 - b. PCCU will provide emergency response during a Code OB until the neonatal resuscitation team arrives and assumes responsibility for neonatal resuscitation.
 - c. PCCU RRT will provide suction setup, oxygen and room air with blender (neonates are resuscitated with lower oxygen concentrations or room air to avoid oxygen toxicity).
7. Notify **Neonatal Intensive Care Unit (NICU) Charge Nurse** of patient admission at 74631. NICU will be responsible for the care of the neonate.
8. **Consult OBSTETRICAL Anesthesia: CCTC RN to page the obstetrical anaesthesia consultant on call (notify upon patient admission to CCTC).**
 - a. To determine gestation age and viability. Gestational age may be adjusted during the patients admission.
 - b. To assess maternal health and anesthetic risk
 - c. To plan anesthetic care for labour and/or birth
 - d. To be aware of all obstetrical in-patients.
 - e. To determine monitoring requirements
 - f. To work in collaboration with the critical care team and obstetrical care team to provide quality care of the critically ill parturient
9. **Document in the Physician Order Sheets** that the patient is X weeks and X days pregnant. This will be identified on the MAR.
10. Critically ill obstetrical patients are at risk for life threatening hemorrhage. Preparation in the event of hemorrhage is needed for all critically ill obstetrical patients.

Ensure that blood transfusion consent has been obtained at admission and that Blood Transfusion Lab sample is always current.

Ensure that even stable patients have adequate vascular access.

Knowledge of a pregnant patient's RH status is needed. Rh immune globin must be administered anytime there has been potential communication of fetal and maternal blood (including delivery, vaginal bleeding, placental disruption etc). More information can be obtained from the Blood Transfusion Manual at:

http://www.lhsc.on.ca/lab/bldbank/btm/S_rhig.pdf

11. Ensure that all radiology and investigational test requisitions **include pregnancy status**.
12. **Obtain Emergency Equipment for patients with viable fetus, and keep at bedside as follows:**

In the event of an emergency birth or crash C-section, there may be insufficient time to obtain equipment, therefore, emergency equipment will be kept at the bedside for the duration of the patient's admission/pregnancy. Obstetrical and neonatal resuscitation teams will expect equipment to be available upon their arrival.

a. **Maternal birth equipment:**

From Obstetrical Care Centre (Charge Nurse):

- i. **Vaginal Birth Tray** (for all pregnant patients, contact OBCU)
- ii. **C-Section Tray** (Nb: only if > 23 weeks; obtain from OBCU)
- iii. **C-Section Disposable Pack** (contains radiopaque sponges, blades and other disposables)
- iv. **2-3 260 Vicryl sutures**

b. **Neonatal Resuscitation Equipment (only if > 23 weeks gestation or ordered by obstetrics):**

The infant warmer and all infant resuscitation equipment will be kept in PCCU as the "Code OB" cart, and brought to CCTC upon notification. Equipment and supplies will be regularly checked by PCCU staff. Keep this plugged in at all times in an ADJACENT patient room that has been assigned as "infant resuscitation room".

Keep neonatal equipment covered with plastic to protect against contamination.

The Code OB cart will be kept in CCTC for the duration of the patient's admission. If a Code OB is called within Victoria Hospital during this time, the cart may be temporarily removed. In the unlikely event that urgent delivery is required in CCTC at the same time, the PCCOT team will obtain additional equipment as required.

- i. **Warming Table** (also called "Infant Care Centre", this is an infant bed that allows easy access of the infant for resuscitation, and includes an overhead heater and skin sensing system):

Obtain warmer from PCCU. **Keep in room where there is access to a wall plug. As soon as you are aware of a potential birth, the warmer should be turned on.**

Return to the "What's New Page" for quick instructions on the use of the warmer.

Silver dots are tied in a bag to the neonatal monitor for use with the warming sensor.

- ii. **Infant Resuscitation Box (from PCCU):**

The infant resuscitation box (tackle box) is kept in PCCU with the emergency infant warmer. A list of supplies is identified on the laminated card tied to the handle. The box includes airway and IV equipment.

Neonates who require ventilatory support will be manually ventilated initially. If required, the neonatal ventilator/transport unit will be obtained by neonatal resuscitation team.

- iii. **Neonatal Medication Box (PCCU):**

A neonatal medication box (2 small clear plastic boxes that are secured together) is kept in PCCU with the emergency warmer, along with the Propac and Emergency Resuscitation Equipment Box. Laminated drug dosing cards are attached to the monitor handle.

iv. **Portable Neonatal Bedside Monitor and Supplies (PCCU):**

The portable Propac monitor is set for neonatal defaults and kept with the emergency infant warmer. It provides ECG, non-invasive SpO2 and non-invasive BP for neonatal use.

Hemodynamic monitors must be set using neonatal defaults and with cables suited to infant BP cuffs and SpO2 probes. Pediatric transducers (when invasive monitoring is used) have smaller volume flush devices (e.g., do not attempt to use adult supplies).

A plastic bag containing the following neonatal supplies is tied to the handle of the portable monitor and includes:

1. Neonatal BP cuffs for use on arms or thighs (Size 1 ~ age < 23 weeks; Size 2 ~ < 28 weeks; Size 3 ~ < 32 weeks; Size 4 ~ term; Size 5 ~ large term baby). Currently, we only have 3 of these sizes available; if different sizes are required the PCCOT or neonatal transport team needs to be contacted.
2. Neonatal ECG electrodes: These have factory attached electrodes that are plugged into the ECG cable. Three lead (versus 5 lead) are used for neonates.
3. Micro blood tubes
4. A diaper (if neonate is not catheterized, a diaper is placed to identify evidence of output)
5. Silver reflective dots for use with the warmer.

v. **Neonatal oxygen and suction (PCCU):**

PCCU will keep a suction regulator and setup, neonatal suction catheters and oxygen blender with emergency Code OB equipment.

The RRT in PCCU will set up the suction and oxygen upon admission of the mother to CCTC.

- vi. Cover warming table and emergency suction equipment with a plastic wrap to keep it clean until use.

13. In the event that birth (or loss) occurs in CCTC, OBCU will assume responsibility for all procedures related to the fetus or neonate. This will include provincial registrations, notification of photographer and social worker and completion of memory box.

- Fetal loss before 20 weeks is considered a miscarriage (spontaneous abortion) if there is no evidence of heart beat or breathing.
- All deliveries of a live born infant (i.e. an infant that takes a breath or has a heart beat), *regardless of gestational age*, must be registered with the province of Ontario as a live birth or stillbirth.
- Age of viability is generally considered as > 23 weeks; multiple factors may influence actual viability and decisions regarding neonatal resuscitation.

