Pediatric Donation After Circulatory Determination of Death (DCD)

Clinical checklist

Identification and referral

- [ ] Confirm a consensual decision to withdrawal life sustain measures (WLSM) has been made by the substitute decision maker (SDM) and health care team.
- [ ] Refer the potential donor to your organ donation organization (ODO) to assess initial donation suitability.
- [ ] Contact the coroner, if applicable, for permission to proceed with donation.
- [ ] Arrange for a donation discussion with the family; an ODO coordinator must be present for this discussion – offering donation opportunities is a part of quality end of life care.

Considerations

Unless raised by the family/SDM, there should be no donation discussion prior to a decision for WLSM.

Testing for donation suitability should not occur prior to a WLSM decision.

Donation discussions and obtaining consent

The ODO coordinator or representative will discuss the following with the family:

- The DCD process, including an estimated timeline for WLSM and organ recovery.
- Organs and tissue suitable for transplantation.
- Pre- and post-mortem interventions that may be necessary.
- Procedures for death determination.
- End-of-life care plan should donation not proceed after WLSM.
- Consent for donation can be withdrawn at any time.

If consent for donation is obtained, the following must be completed:

- [ ] Consent for Organ and/or Tissue Donation.
- [ ] Consent for pre-mortem interventions.
- [ ] Medical/Social History Questionnaire.
- [ ] Determine if there are any special requests by the family/SDM (e.g. a prayer or favourite song to be played in the operating room (OR).

Considerations

The family/SDM may need time to make a donation decision. The health care team and ODO coordinator should be available to answer questions. Information pamphlets should be provided if available.

The family/SDM should be assured their loved one and family will continue to receive quality end of life care, regardless of their donation decision.

Donation suitability and interventions

- [ ] Arrange for blood work and any necessary pre-mortem testing/interventions.
- [ ] Establish required heparin dosage and administration timing with the attending physician, ODO coordinator, and recovery teams; ensure the order is made prior to WLSM.
- [ ] Confirm availability of a well-functioning arterial line and properly scaled monitoring equipment.
- [ ] Arrange for post-mortem testing and necessary resources (e.g. bronchoscopy and anesthesia/ respiratory therapy if lung donation is possible).

Considerations

If a functional arterial line is not present and impossible to place, contact the ODO or local donation physician for alternative methods to confirm death after circulatory arrest.

Organ recovery logistics

- [ ] Confirm location of WLSM; consider family/ SDM preferences, hospital logistics, and resources. WLSM should occur as close to the OR as possible.
- [ ] Confirm timing of WLSM and book OR.
- [ ] Determine plan for rapid patient transport to the OR, if necessary.
- [ ] If WLSM occurs outside of the Intensive Care Unit (ICU), determine plan for patient's return to the ICU if donation does not proceed after WLSM.
- [ ] Coordinate two physicians not involved in organ recovery for declaring death.
- [ ] Prior to WLSM, huddle with OR team:
  - Confirm OR is set up appropriately.
  - Review DCD process, including permissible time from WLSM to asystole, staff roles and responsibilities, and required documentation.
  - Review any special considerations from the family.

Considerations

Organ donation requires a multidisciplinary effort from the OR, ICU, anesthesia, respiratory therapy, psychosocial support, and palliative care teams.

The surgical recovery teams typically arrive one hour prior to WLSM to set up the OR.

Canadian Blood Services
BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES

Pediatric Donation After Circulatory Determination of Death (pDCD)

Clinical checklist

Withdrawal of life sustaining measures

- ☐ Ensure WSLM materials and medications are ready.
- ☐ Prior to WLSM, huddle with ICU team:
  - Remind staff that WLSM should occur in accordance with hospital practice, policy, and guidelines.
  - Review DCD process, including permissible timeframe from WLSM to circulatory arrest, staff roles and responsibilities, required documentation, and plan for return to the unit/end of life care if donation does not proceed.
- ☐ Prior to WLSM, huddle with SDM:
  - Review DCD process, including permissible timeframe from WLSM to circulatory arrest, and plan for return to the unit/end of life care if donation does not proceed.

Considerations

Refer to WLSM Checklist, if applicable.

Documentation during WLSM should include:

- Doses and indications for end of life sedation and analgesia
- Timing of all acts of WLSM including cessation of inotropes and extubation
- Careful documentation of patient vital signs

Death determination and organ recovery

- ☐ Circulatory arrest is defined as the absence of anterograde circulation as defined by a flat line arterial trace.
- ☐ Circulatory arrest must be observed for five minutes by the physician determining death during which no interventions are undertaken. Any evidence of circulation noted during the five minutes of observation requires restarting the timing of the observation period from the last noted circulatory activity.
- ☐ Facilitate rapid transfer of the patient to the OR, if necessary.
- ☐ Two physicians are required to declare death and sign the necessary paperwork.
  - At least one physician must be a staff physician in the ICU where the patient is located and possess full and current licensure for independent medical practice in the relevant Canadian jurisdiction.
  - The second physician can be on an educational register (e.g. residents, fellows) if they have the requisite skills and training and are approved by their institution to perform the role in this setting.

Considerations

If the patient does not die within the permissible timeframe from WLSM to circulatory arrest, organ recovery will not proceed.

On occasion, organs are declined upon visualization in the OR; organ acceptance is at the transplant team's discretion.

Post organ recovery considerations

Family / substitute decision maker

- ☐ Ensure a physical location and appropriate emotional/psychosocial support for the family/SDM during organ recovery.
- ☐ Confirm whether the family/SDM wishes to spend time with the patient after organ recovery, or if they prefer the patient be transported directly to the morgue.
- ☐ If return to the ICU is desired, arrange for the patient to be washed and transported back to the ICU post organ recovery.
- ☐ Organize follow-up grief counseling and social support as needed or requested by the family/SDM.

Health care team

- ☐ Debrief with ICU staff after WLSM and/or organ recovery.
- ☐ Debrief with OR staff after organ recovery.
- ☐ Remind all staff involved in the donation process of access to psychosocial support.

Canadian Blood Services
BLOOD
PLASMA
STEM CELLS
ORGANS
& TISSUES