Auckland City Hospital

DCCM and Level 8 OT

DONATION AFTER CIRCULATORY DEATH (DCD)

DATE: ……/……/……..

Patient Label

DONATION AFTER CIRCULATORY DEATH

Criteria for identification of potential DCD donor:

- On ventilatory support in ICU irrespective of diagnosis
- Consensus that intensive therapies will be withdrawn in the near future
- No age barrier

Advice is available by contacting the donor co-ordinator: 24 hour number 09 630 0935

The following procedure for DCD is listed in approximate sequence

	Procedure	Action by √ when completed	Explanatory Notes
1	Agreement by treating team that continuing intensive therapies is not in the patient's best interest.	Intensivist and DCCM nurse	The decision to withdraw intensive therapies is made by the treating team in accord with good medical practice. This includes consideration of the patient's best interests, ethical standards and legal requirements.
2	Contact donor coordinator	Intensivist	Please discuss all patients who meet the above criteria for identification of the potential for donation with the donor coordinator on call. The donor coordinator will contact the ODNZ medical specialist on call, who in turn will phone the intensivist.
3	Discuss the possibility of DCD	Intensivist and ODNZ medical specialist	These issues will be addressed • Likelihood of deterioration to brain death and possibility of DBD • Whether the interval between withdrawal of treatment and death is likely to be within the timeframe for DCD • The doses of opioid and/or sedative the intensivist plans to use at the time of withdrawal of intensive therapies. The ODNZ medical specialist will not seek to modify this plan in any way. • Organs and tissues under consideration for DCD – lungs, liver, kidneys, heart valves, eyes and skin • Whether or not referral to the coroner is required • Possible timing of withdrawal of intensive therapies • Whether the intensivist objects to giving heparin at the time of withdrawal of intensive therapies • The name of the intensivist who will be involved at the time of withdrawal of intensive therapies.
4	Agreement to withdraw intensive therapies	Intensivist and DCCM nurse	A patient with decision-making capacity and the patient's family/whānau and the treating team must agree to the withdrawal of intensive therapies.
5	Provide space and time for patient and/or family/whānau to attend to cultural/spiritual/ emotional/social needs	Intensivist and DCCM nurse	Offer karakia and spiritual support to family/whānau during this time.

	Procedure	Action by √ when completed	Explanatory Notes
6	Discuss organ donation with both the patient (if he/she has decision making capacity) and the family/whānau	Intensivist and DCCM nurse	Discuss the possibility of organ donation and explain the DCD process including: • Continuation of care by the DCCM team, including the use of opioid and/or sedation if required • Family/whānau can only have a few minutes with their relative following death • Whether intensive therapies will be withdrawn in DCCM or OT • The organs and tissues that are under consideration • If death does not occur within the required timeframe that DCD will not proceed but tissue donation can still be facilitated following death. • Use of heparin • Confirm the intent of the family/whānau (and of a patient with decision-making capacity) to proceed with DCD.
7	Inform donor coordinator	Intensivist	Inform donor coordinator of outcome of discussion. When family/whānau agreeable to donation, whether or not heparin will be given and whether referral to the coroner is required.
8	Donor bloods	DCCM staff	The label on the pink blood tube in the Donor Pack must be handwritten. Patient labels can be used on all other tubes and the form. Ensure all sections of the blood request form, including the Specimen Request Declaration, are completed. Send Donor Pack by DCCM orderly to Blood Bank, Auckland City Hospital. **Testing of bloods commences only after family/whānau has indicated intent to proceed with DCD.**
9	Donor assessment	Donor coordinator	Obtain information for Confidential Donor Referral.
10	Medical/Social Questionnaire and Physical Assessment	Donor coordinator	Complete Physical Assessment and meet with family/whānau to complete Medical/Social questionnaire. Email completed documentation to Donor Coordinator: contactus@donor.co.nz
11	Agreement of the Coroner	Intensivist	When referral to the coroner is required, agreement from the coroner for organ and tissue retrieval must be obtained before intensive therapies are withdrawn: 24 hr number 0800 266 800. The Chief Coroner agrees that, in planning for DCD, it is appropriate for the coroner to agree, before death has occurred. Document outcome of the discussion and the name of the coroner involved on the Authority for Organ and Tissue Removal Form.
12	Complete patient ID with police	Intensivist	When the coroner has accepted jurisdiction, request police to attend and complete patient ID while family/whānau is present, preferably while the patient is in DCCM and before withdrawal of intensive therapies.
13	Confirm organs and tissues that can be donated	Donor coordinator	Contact transplant units with donor information and whether or not heparin will be given. Inform DCCM staff of organs and tissues that can be donated.
14	Cessation of enteral feeding for lung donation	Intensivist and DCCM nurse	If lung donation is planned, donor coordinator will ask DCCM staff to cease enteral feeding and to aspirate the NG tube.
15	Determine if family/whānau wish to be present at time of withdrawal of intensive therapies and death	Intensivist or donor coordinator	• If family/whānau members wish to be present, withdrawal of intensive therapies will take place in an appropriate bedspace in DCCM • If no family/whānau members wish to be present, withdrawal of intensive therapies will take place in OT 12.
16	Written consent for organ and tissue donation	Intensivist or donor coordinator	Inform family/whānau of DCD process, the organs and tissues that are able to be donated and if heparin will be given before withdrawal of intensive therapies. Family/whānau representative signs Authority for Organ and Tissue Removal Form. If family/whānau is not present, verbal consent in accord with the Human Tissue Act 2008 is documented on Authority for Organ and Tissue Removal Form.

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	Procedure	Action by √ when completed	Explanatory Notes
17	Inform donor coordinator	Intensivist	When discussion with family/whānau and consent is completed by intensivist, inform donor coordinator whether consent has been obtained, for which organs and tissues, whether the family/whānau wish to be present and where withdrawal of intensive therapies will occur.
18	Organisation of donor surgery	Donor coordinator	Arrange OT time in liaison with DCCM, OT and the donor surgical team(s). Inform DCCM of OT time.
19	Patient care in DCCM	DCCM staff	Continue patient care, including maintenance of adequate MAP and oxygenation.
20	OT 12 set up for donor surgery	Donor surgical team(s)	Set up OT 12 (if available or designated OT) for donor surgery. Trolleys are set up and remain uncovered in OT. Donor scrub nurse remains with sterile set-up. Donor coordinator informs DCCM staff when OT set-up is complete.
21	Planning meeting	Donor coordinator	Facilitate a meeting in DCCM meeting room prior to commencement of DCD process for those who will be involved: intensivist, patient's nurse, charge nurse, DCCM runner (assigned to assist patient's nurse when patient goes to OT), OT staff, anaesthetic technician (if lungs are being donated), donor surgical team(s), OT HCA and donor coordinator(s). Staff will not be allowed to be involved in the DCD process if they have not been present at the planning meeting. Documentation will be checked at this meeting. OT staff will provide disposable gowns and hats (masks and overshoes are not required) if withdrawal of intensive therapies is to be in OT. Identify DCCM nurse who will liaise with PACU charge nurse.
22	Inform DCCM staff	Donor coordinator	Inform DCCM staff when OT staff are ready and donor surgical team(s) are gowned and gloved.
For withdrawal of intensive therapies in OT with no family/whānau members present, go to No. 34			
For withdrawal of intensive therapies in DCCM with family/whānau members present, continue from No. 23			
23	Administration of heparin	Intensivist	Give heparin (300u/kg) prior to withdrawal of intensive therapies provided the intensivist does think it will influence the process of dying.
24	Preparation for lung donation	Intensivist and DCCM nurse	If lung donation planned, place patient in a 30 degree head up position. Aspirate the nasogastric tube and avoid external pressure to the abdomen.
25	Withdrawal of intensive therapies	Intensivist and DCCM nurse	Discontinue ECG monitoring and continue arterial pressure monitoring and pulse oximetry. Withdraw all intensive therapies (ventilation, ETT and inotropes) at the same time. An intensivist and DCCM nurse remain with the patient until death has occurred. Any appearance of distress is treated with opioid and/or sedation in the same manner as would be done if intensive therapies were being withdrawn and DCD was not a possibility.
26	Determination of death	Intensivist	Determine death on the basis of: • Immobility • Apnoea • Absence of pulsatility on the arterial line of at least **5** minutes duration Notify donor coordinator and document time of death on the Determination of Death Form. **If death does not occur within the required timeframe, DCD will not proceed. Tissue donation can be facilitated following death.**
27	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff of death.

DONATION AFTER CIRCULATORY DEATH

	Procedure	Action by √ when completed	Explanatory Notes
28	Transfer of patient to OT	Intensivist, DCCM nurse & donor Coordinator(s)	Intensivist, DCCM nurse and donor coordinator transfer deceased patient immediately to OT Department doors at PACU back corridor. OT staff and donor coordinator(s) transfer patient to OT. If lung retrieval planned, the patient remains on the DCCM bed. If abdominal organ donation only, the donor coordinator(s), circulating nurses and HCA transfer patient to OT table. The DCCM nurse provides care and support for the family/whānau.
30	Check patient ID and Determination of Death Form	Donor surgical team(s), OT staff and donor coordinator	Donor coordinator completes patient ID and sights of time of death documented on Determination of Death Form with donor surgical team(s) and OT staff.
31	Re-intubation for lung donation	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately.
32	Transfer of patient to OT table	Thoracic anaesthetist, OT staff and donor coordinator(s)	If lung donation planned, thoracic anaesthetist, donor coordinator(s), circulating nurses and HCA transfer patient to OT table.
33	Donor surgery	Donor surgical team(s)	Organ donor surgery commences immediately.
For care of patient following donation, continue from No. 47			
For withdrawal of intensive therapies in OT with no family/whānau members present, continue from No.34			
	Procedure	**Action by** √ when completed	**Explanatory Notes**
34	Transfer of patient to OT	Intensivist, DCCM nurse and donor coordinator	DCCM staff who will be in OT require disposable gowns and, hats but not masks and overshoes. Intensivist, DCCM nurse and donor coordinator transfer patient to OT 12 (if available or designated OT) via PACU back corridor using self-inflating bag and O2 cylinder and transport monitor. Continue arterial pressure monitoring and inotropic support, if required. Continue pulse oximetry. Discontinue ECG monitoring. Take all medications that might be required, including heparin, opioids and sedation. Intensivist and DCCM nurse continue patient care in OT.
35	Transfer to OT table	Anaesthetist, OT nurses, donor coordinator(s)	If lung donation planned, anaesthetist, circulating nurses, donor coordinator(s) transfer patient to OT table. For abdominal-only donation, circulating nurses, donor coordinator and HCA transfer patient to OT table.
36	Preparation for lung donation	Intensivist and DCCM nurse	If lung donation planned, place patient in anti-Trendelenburg with head end of bed elevated to 30 degrees on the OT table. Aspirate the nasogastric tube and avoid external pressure to the abdomen.
37	Sight patient ID	Thoracic anaesthetist or donor coordinator	If lung donation planned, anaesthetist completes patient ID with donor surgical team(s) and OT staff. If abdominal organs only, donor coordinator completes patient ID completed with donor surgical team and OT staff.
38	Patient prepared for donor surgery	Donor surgical team(s)	Patient prepared and draped for surgery. A donor surgical nurse remains in OT but all other OT staff and the donor surgical team(s) (gowned and gloved) leave OT and wait in the set-up room.
39	Administration of heparin	Intensivist	Give heparin (300u/kg) prior to withdrawal of intensive therapies provided the intensivist does think it will influence the process of dying.

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	Procedure	Action by √ when completed	Explanatory Notes
40	Withdrawal of intensive therapies	Intensivist and DCCM nurse	Withdraw all intensive therapies (ventilation, ETT and inotropes) at the same time. Continue arterial pressure monitoring and pulse oximetry (ECG monitoring will have been discontinued in DCCM). An intensivist and DCCM nurse remain with the patient until death has occurred. Any appearance of distress is treated with opioid and/or sedation in the same manner as would be done if intensive therapies were being withdrawn and DCD was not a possibility.
41	Determination of death	Intensivist	Determine death on the basis of: • Immobility • Apnoea • Absence of pulsatility on the arterial line of at least **5** minutes duration Notify donor coordinator and document time of death on the Determination of Death Form. All equipment remains in OT until after donor surgery. **If death does not occur within the required timeframe, DCD will not proceed and the patient will return to DCCM for continuing care. Tissue donation can be facilitated following death.**
42	DCCM staff leave OT	Donor coordinator	Intensivist and DCCM nurse leave the OT as soon as death has been determined and documented
43	Inform transplant donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff (waiting in set-up room) of death.
44	Sight time of death on Determination of Death Form	Donor surgical team(s), OT staff and donor coordinator(s)	Donor coordinator completes sighting of time of death on Determination of Death Form with donor surgical team(s) and OT staff.
45	Re-intubate trachea for lung donation	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately (after DCCM staff have left OT).
46	Donor surgery	Donor surgical team(s) and OT staff	Organ donor surgery commences immediately (after DCCM staff have left OT)

For care of patient following donation, continue from No. 47

	Procedure	Action by √ when completed	Explanatory Notes
47	Completion of routine death documentation	DCCM staff	Routine death documentation is the responsibility of the intensivist and DCCM nurse. Refer to Death Information Resource Folder in DCCM.
48	Care of patient following donation	OR staff and donor coordinator(s)	Following donation, care of the patient is carried out by OT staff and donor coordinator(s). OT nurse contacts duty manager to inform of death. If family/whānau wish to spend time with their relative following donation, patient is transferred to a bedspace in DCCM. This will have been arranged with the DCCM clinical charge nurse prior to withdrawal of intensive therapies. Duty manager arranges transfer of the patient to the mortuary.
49	For coronial cases	DCCM registrar	Donor coordinator informs DCCM registrar that donor surgery has been completed. DCCM registrar notifies police. Police complete Patient ID with family/whānau (if not already completed) and Life Extinct Form. Police transfer patient to mortuary.

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