North Shore Hospital

Waitemata DHB

DONATION AFTER CIRCULATORY DEATH (DCD)

Patient Label

DATE: ……/……/……..

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- Consensus that intensive therapies will be withdrawn in the near future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 ODNZ donor coordinator: 24 hour number 09 630 0935

The following procedure for DCD is listed in approximate sequence

	Procedure	Action by √ when completed	Explanatory Notes
1	Discuss withdrawal of intensive therapies with both the patient (if he/she has decision-making capacity) and the whānau	Intensivist and ICU 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 and takes into account the views of the patient, as far as they can be ascertained, and of the whanau.
2	Agreement to withdraw intensive therapies	Intensivist and ICU nurse	A patient with decision-making capacity, the patient's whānau and the treating team must agree to the withdrawal of intensive therapies before DCD can be considered.
3	Provide space and time for patient/ whānau to attend to cultural/spiritual/ emotional/social needs	Intensivist and ICU nurse	E.g pastoral care, He Kamaka Waiora to support whanau during this time
4	Contact donor coordinator	Intensivist	Please discuss all patients who meet the above criteria for identification of a potential donor with the donor coordinator on call. The donor coordinator will contact the ODNZ medical specialist on call, who in turn will phone the intensivist.
5	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 • Organs and tissues under consideration for DCD donation – lungs, liver, kidneys, heart valves, skin and eyes • 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. • Whether the interval between withdrawal of intensive therapies and death is likely to be within the timeframe for DCD • 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.
6	Contact the ICU Donation Link nurse	ICU staff	ICU staff contact the ICU Donation Link nurse.

	Procedure	Action by √ when completed	Explanatory Notes
7	Discuss organ donation with both the patient (if he/she has decision-making capacity) and the whānau	Intensivist and ICU nurse	Discuss and explain the DCD process including: • Continuation of care by the ICU team, including the use of opioid and/or sedation if required • Whether therapy will be withdrawn in ICU or OT • Whānau can only have a few minutes with their whānau member following death • The organs and tissues that are under consideration • Use of heparin • If death does not occur within the required timeframe that DCD will not proceed but tissue donation can be facilitated following death. • Confirm the intent of the whānau (and of a patient with decision-making capacity) to proceed with DCD.
8	Inform donor coordinator	Intensivist	Inform donor coordinator of outcome of discussion, whether or not heparin will be given and whether referral to the coroner is required.
9	Donor Bloods	ICU staff	The label on the pink blood tube in the Donor Pack must be handwritten. Patient labels can be used on the other tubes. Ensure all sections of the blood request form, including the Specimen Request Declaration, are completed. Donor coordinator will arrange courier to collect Donor Pack from ICU and transport to NZBS for testing (as soon as possible to prevent undue delays for the donor whānau). **Testing of bloods commences only after whānau has indicated intent to proceed with DCD.**
10	Donor assessment	Donor coordinator	Obtain information for the Confidential Donor Referral.
11	Medical/Social Questionnaire and Physical Assessment	Donor coordinator	Complete Physical Assessment and meet with whānau to complete Medical/Social questionnaire. Email completed documentation to donor coordinator: contactus@donor.co.nz.
12	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 hour 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.
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 ICU staff of organs and tissues that can be donated.
14	Cessation of enteral feeding for lung donation	Intensivist and ICU nurse	If lung donation is planned, donor coordinator will ask the ICU staff to cease enteral feeding.
15	Determine if whānau wish to be present at time of withdrawal of intensive therapies and death	Donor coordinator	• If whānau wish to be present, withdrawal will take place in ICU, in a single room if available • If no whānau wish to be present at the time of withdrawal, withdrawal will take place in OT 2.
16	Written consent for organ and tissue donation	Donor coordinator	Inform 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. Whānau representative signs Authority for Organ and Tissue Removal Form. If 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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17	Complete patient ID with police	Intensivist	When the coroner has accepted jurisdiction, request police to attend and complete patient ID while whānau is present.
18	Inform ICU staff	Donor coordinator	Inform ICU staff whether consent has been obtained, for which organs and tissues, whether the whānau wish to be present and where withdrawal of intensive therapies will occur.
19	Organisation of donor surgery	Donor coordinator	Organise OT time in liaison with ICU, OT and the donor surgical team(s). Inform ICU of OT time.
20	Organisation of OT staff	OT charge nurse	Organise OT staff (circulating nurses x 2, anaesthetic technician if lung retrieval is being planned) willing to be involved. Request anaesthetic technician to inform senior anaesthetic technician.
21	Patient care in ICU	ICU staff	Continue patient care, including maintenance of adequate MAP and oxygenation.
22	Travel to donor hospital	Donor surgical teams and donor coordinator	Donor surgical team(s) and donor coordinator travel to hospital.
23	OT 2 set up for donor surgery	Donor surgical team(s) and OT staff	Set up OT 2 for donor surgery. Trolleys are set up and remain uncovered in OT. Donor nurse remains with sterile set-up. Donor coordinator informs ICU staff when OT set-up is complete.
24	Planning meeting	Donor coordinator	Facilitate a meeting in the OT Procedure Room or OT Charge Nurses Office prior to commencement of DCD process for those who will be involved: intensivist, ICU nurse, OT nurses (2), anaesthetic technician (if lungs are being donated), OT orderly, donor surgical team(s) and donor co-ordinator(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 appropriate OT attire for ICU staff, if withdrawal is going to be in OT.
25	Inform ICU staff	Donor coordinator	Inform ICU staff when OT staff are ready and donor surgical team(s) are gowned and gloved.
For withdrawal of treatment in ICU (single room if available) with whānau present, continue from No. 26			
For withdrawal of treatment in OT 2 without whānau present, go to No. 36			
26	Administration of heparin	Intensivist	Give heparin (300u/kg) prior to withdrawal of intensive therapies provided the intensivist does not think will influence the process of dying.
27	Preparation for lung donation	Intensivist, and ICU nurse	If lung donation is planned, place patient in a 30 degree head up position. Aspirate the nasogastric tube and avoid external pressure to the abdomen.
28	Withdrawal of intensive therapies	Intensivist and ICU 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 ICU 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.
29	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.**

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	Procedure	Action by √ when completed	Explanatory Notes
30	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff of death.
31	Transfer of patient to OT 2	Intensivist, donor coordinator, and OT orderly	Intensivist, donor coordinator and OT orderly transfer deceased patient immediately to OT department doors. Circulating nurses, OT orderly and donor coordinator transfer deceased patient into OT. If lung retrieval is planned, the patient remains on the ICU bed. If abdominal organ retrieval only, the donor coordinator and OT staff transfer patient to OT table. The ICU nurse provides care and support for the whānau.
32	Check patient ID and Determination of Death Form	Donor surgical team(s) OT staff and donor coordinator	Donor coordinator completes patient ID and sights time of death documented on Determination of Death Form with donor surgical team(s) and OT staff.
33	Re-intubate trachea for lung retrieval	Thoracic anaesthetist and anaesthetic technician	If lung donation planned, patient re-intubated immediately.
34	Transfer of patient to OT table	Anaesthetic staff, OT staff & donor coordinator	If lung donation planned, anaesthetic, OT staff and donor coordinator transfer patient to OT table.
35	Donor surgery	Donor surgical team(s)	Donor surgery commences immediately.
	For care of patient following donation, go to No. 47		
	For withdrawal of intensive therapies in OT 2 with no whānau present, continue from No. 36		
36	Transfer of patient to OT 2	Intensivist, ICU nurse(s) and donor coordinator	ICU staff who are going to be with the patient in OT and are not wearing scrubs require disposable gowns, but not hats or masks. Continue ventilation, arterial pressure monitoring and inotropic support, if required. Continue pulse oximetry. Discontinue ECG monitoring. Transfer patient to OT 2. Take all medications that might be required, including heparin, opioids and sedation. Intensivist and ICU nurse continue patient care in OT.
37	Sight patient ID	Thoracic anaesthetist or donor coordinator	If lung donation planned, Thoracic Anaesthetist completes patient ID with donor surgical team(s) and OT staff. If abdominal organs only, donor coordinator completes patient ID with donor surgical team and OT staff.
38	Preparation for lung donation	Intensivist and ICU nurse	If lung donation planned, place patient in a 30 degree head up position on the operating table by tilting up the head of the table. Aspirate the nasogastric tube and avoid external pressure to the abdomen.
39	Patient prepared for donor surgery	Donor surgical team(s)	Patient prepared and draped for surgery. Trolleys are covered and remain in OT. A donor surgical nurse remains in OT but all other OT staff and donor surgical team(s) (gowned and gloved) leave OT and wait in the anaesthetic room.
40	Administration of heparin	Intensivist	If heparin is to be given, administer 300u/kg prior to withdrawal of treatment.
41	Withdrawal of intensive therapies	Intensivist and ICU 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 ICU). An intensivist and ICU 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.

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	Procedure	Action by √ when completed	Explanatory Notes
42	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 and the patient will return to ICU for continuing care. Tissue donation can be facilitated following death.**
43	ICU staff leave OT	Donor coordinator	All ICU staff leave the OT as soon as death has been determined and documented.
44	Inform donor surgical team(s) of death	Donor coordinator	Inform donor surgical team(s) and OT staff (waiting in anaesthetic room) of death.
45	Sight time of death on Determination of Death Form	Transplant retrieval teams, OT staff and donor Coordinator	Donor coordinator sights time of death on Determination of Death Form and patient ID with donor surgical team(s) and OT staff.
46	Re-intubate trachea for lung retrieval	Thoracic anaesthetist & anaesthetic technician	If lung donation planned, patient re-intubated immediately (after ICU staff have left OT)
47	Donor surgery	Donor Surgical Team(s) & OT staff	Donor surgery commences immediately (after ICU staff have left OT).
For care of deceased following donation, continue from No. 47			
Care of deceased following donation			
48	Completion of routine death documentation	ICU staff	Routine death documentation is completed by the intensivist and ICU nurse. ICU nursing staff notify Duty Manager of death.
49	Care of deceased following donation	OT staff, donor coordinator and ICU nurse	Following donation, care of the deceased patient is carried out by OT staff and donor coordinator. If the whānau wish to spend time with their relative following donation, this will be facilitated in ICU. If the whānau is not present, the deceased patient will be transferred directly to the mortuary.
50	For coronial cases	ICU staff	Notification of Police is by ICU medical staff or nursing coordinator. Patient is transferred to ICU Isolation Room. Police complete Patient ID and Life Extinct Form with whānau (if not already completed). Police organises funeral director to transfer deceased patient to the mortuary.

Updated Aug 2023