Assessment for Donation after Brain-stem Death

Does patient have a confirmed diagnosis of brain-stem death?

**Patient has confirmed diagnosis of brain-stem death**

- Maintain therapy and physiological stability

**Patient DOES NOT yet have diagnosis of brain-stem death confirmed**

- Go to Brain-stem Death Testing, Adult

Can be performed in parallel

**Notification of potential donor to Specialist Nurse Organ Donation (if not already done)**

**Check Organ Donor Register**

**Refer to Coroner or Procurator Fiscal**

**Donor assessment**

**Patient potentially suitable for organ donation?**

**Patient potentially suitable for organ donation**

- Go to DBD consent / authorisation

**Patient NOT potentially suitable for organ donation**

- Organ support should be discontinued

- Final act of care

- Consider tissue donation
1 Background information

Quick info:

**Donation after Brain-stem Death, Adult Pathway**

**Scope:**
- Donation after Brain-stem Death (DBD), also known as Heartbeating Donation (HBD), refers to the retrieval of organs and eye tissue for the purposes of transplantation after death that is confirmed using neurological criteria (brain-stem death).
- In the UK, DBD programmes currently support the retrieval and transplantation of the following solid organs:
  - Heart
  - Lung
  - Kidney
  - Liver
  - Pancreas
  - Small bowel (stomach, ileum, jejunum, colon, abdominal wall, spleen)
  - Facial tissue (in some parts of England)
- Tissue donation from potential DBD donor, including when solid organ donation does not progress
- Donation from all care settings, most commonly but not exclusively ICUs and Emergency Medicine Departments

**Out of scope:**
- Donation from paediatric patients
- Tissue donation from tissue only donors
- However information is provided on tissue only donation for patients who start on the clinical pathway

**Incidence and prevalence:**
- The incidence of diagnosed brain-stem death on ICUs in the UK has declined considerably over recent years, with the Potential Donor Audit recording 1147 cases in 2008/9 compared to 1339 in 2004/5. There has been a corresponding fall in the number of heartbeating brainstem donors, from 664 to 611 respectively. DBD donors donate an average of 4 organs per donation

2 Information resources for patients / families

Quick info:
An information leaflet for families is available here: Organ and Tissue Donation Information for Families

3 Updates to this pathway

Quick info:
This is the first version of this pathway.

7 Maintain therapy and physiological stability

Quick info:
Detailed information on management of brain-stem dead patients can be found at: Management of brain-stem dead donor

9 Notification of potential donor to Specialist Nurse Organ Donation (if not already done)

Quick info:
The Organ Donation Taskforce has recommended that the Specialist Nurse Organ Donation (SN-OD) be notified as soon as an intention to consider the diagnosis of brain-stem death has been made, i.e. before the tests are performed. If this has not already happened, notification should take place as soon as the diagnosis of brain-stem death has been confirmed.
Early referral and communication with the Donor Team will allow suitability for organ and / or tissue donation to be assessed. Ideally this should take place when the decision to test for brain-stem death is taken.

The only **absolute contra-indications** for organ donation are:

- known or suspected new variant Creutzfeldt–Jakob disease (nvCJD) and other neurodegenerative diseases associated with infectious agents
- known human immunodeficiency virus (HIV) disease (but not HIV infection alone)

In addition, it is highly likely that donors with the following conditions will also be declined, although there may be occasions when organs are accepted if the alternative for a specific recipient is imminent death (e.g. from fulminant hepatic failure):

- disseminated malignancy
- melanoma (except local melanoma treated > 5 years before donation)
- treated malignancy within 3 years (except non-melanoma skin cancer)
- age > 90 years
- known active tuberculosis
- untreated bacterial sepsis

On notification, the Specialist Nurse Organ Donation will typically ask for the following patient information:

- Name
- Date of birth
- Post code
- NHS no. or Community Health Index no.
- Notifying clinician name, role and contact details
- Notifying hospital and unit
- Length of stay
- Primary diagnosis
- Significant clinical factors, e.g.
  - most recent urea and electrolyte and liver function test results
  - known virology
  - current instability
  - past medical history of note
  - past social history of note
- Blood group
- Next of Kin
- Next of kin location
- Other immediately relevant family information

**Reference:**


10 **Check Organ Donor Register**

**Quick info:**

The Organ Donor Register is checked for each referral and can be checked by:

- Specialist Nurse Organ Donation
- Any other healthcare professional, by phoning the NHS Blood and Transplant Duty Office on 0117 9757580 or 0117 9757581

Information needed to check the Organ Donor Register is:

- Name
- Date of Birth
- Address including Post code or NHS or Community Health Index No.

The Duty Office may phone back via Hospital switchboard to confirm identity and location of caller.
If required, the Duty Office can fax a copy of the Organ Donor Register entry to the donating Unit, in order to facilitate conversations with family members.

11 Refer to Coroner or Procurator Fiscal

Quick info:

**England, Wales and Northern Ireland**

'Guidance for coroners and donor coordinators working with coroners' published by the Department of Health, Ministry of Justice and Welsh Assembly Government states:

'A death should be reported to the Coroner if:

- The cause of death is unknown
- It cannot readily be certified as being due to natural causes
- The deceased was not attended by a doctor during their last illness or was not seen within the last 14 days or viewed after death
- There are any suspicious circumstances or history of violence
- The death may be linked to an accident (whenever it occurred)
- There is any question of self neglect or neglect by others
- The death has occurred or the illness arisen during or shortly after detention in police or prison custody (including voluntary attendance at a police station)
- The deceased was detained under the Mental Health Act
- The death is linked with an abortion
- The death might have been contributed to by the actions of the deceased (such as a history of drug or solvent abuse, self injury or overdose)
- The death could be due to industrial disease or related in any way to the deceased’s employment
- The death occurred during an operation or before full recovery from the effects of an anaesthetic or was in any way related to the anaesthetic (in any event a death within 24 hours should normally be referred)
- The death may be related to a medical procedure or treatment whether invasive or not
- The death may be due to a lack of medical care
- There are any other unusual or disturbing features to the case
- The death occurred within 24 hours of admission to hospital, unless the admission was for the purposes of terminal care
- It may be wise to report any death where there is an allegation of medical mismanagement'

**Scotland**

'Death and the Procurator Fiscal' published by the Crown Office states:

'Any death which the circumstances or evidence suggest may fall into one or more of the following categories must be reported to the Procurator Fiscal :-

1. any death due to violent, suspicious or unexplained cause.
2. any death involving fault or neglect on the part of another.
3. possible or suspected suicide.
4. any death resulting from an accident.
5. any death arising out of the use of a vehicle including an aircraft, ship or train.
6. any death by drowning.
7. any death by burning or scalding, or as a result of a fire or explosion.
8. certain deaths of children - any death of a newborn child whose body is found, any death from sudden infant death syndrome […] any death due to suffocation including overlaying, any death of a foster child.
9. any death at work, whether or not as a result of an accident.
10. any death related to occupation, for example, industrial disease or poisoning. […]
11. any death as a result of abortion or attempted abortion.
12. any death as a result of medical mishap, and any death where a complaint is received which suggests that medical treatment or the absence of treatment may have contributed to the death. […]
13. any death due to poisoning or suspected poisoning, including prescription or non-prescription drugs, other substances, gas or solvent fumes.
14. any death due to notifiable infectious disease, or food poisoning.
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(15) any death in legal custody.
(16) any death of a person of residence unknown, who died other than in a house.
(17) any death where a doctor has been unable to certify a cause.

References:
Guidance for coroners and donor coordinators working with coroners (England and Wales only):
Death and the Procurator Fiscal (Scotland): http://www.show.scot.nhs.uk/publications/me/death%20and%20pf.htm#Index2

12 Donor assessment

Quick info:
The Specialist Nurse Organ Donation will attend the Unit and carry out a detailed assessment of the potential for donation. This assessment consists of:
- Review of medical records, including, if appropriate, from external healthcare providers
- Review of laboratory and radiology results
- Discussion with clinician with responsibility for patient
- Discussion with nursing staff
- Checking the Organ Donor Register, if this has not already taken place

and will ascertain:
- Age / past medical history
- History of current admission
- Next of kin and family details
- Possible contra-indications
- Cardiovascular status (use of inotropes / pressors )
- Respiratory status (level of ventilatory support, inspired oxygen fraction)
- Renal status
- Whether a referral to the Coroner / Procurator Fiscal is required

13 Patient potentially suitable for organ donation?

Quick info:
Dependent on outcome of Specialist Nurse Organ Donation's assessment of donor and response from Coroner / Procurator Fiscal.

15 Patient NOT potentially suitable for organ donation

Quick info:
Potential reasons why patients would not be suitable for organ donation:
- Family has expressed a strong view that patient would not have wished to be a donor
- Coroner or Procurator Fiscal does not give permission for donation
- Presence of absolute contra-indications:
  - known or suspected nvCJD and other neurodegenerative diseases associated with infectious agents
  - HIV disease (but not HIV infection alone)
- In addition, it is highly likely that donors with the following conditions will also be declined, although there may be occasions when organs are accepted if the alternative for a specific recipient is imminent death (e.g. from fulminant hepatic failure). For these patients, the Specialist Nurse Organ Donation may contact Transplant Centres prior to a decision as to whether to approach the family:
  - disseminated malignancy
  - melanoma (except local melanoma treated > 5 years before donation)
  - treated malignancy within 3 years (except non-melanoma skin cancer)
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Medicine > Organ donation > Donation after Brain-stem Death, Adult

- age > 90 years
- known active tuberculosis
- untreated bacterial sepsis

In the event of a medical contra-indication to donation, it may appropriate to inform the family that donation would have been considered had it been medically possible.

16 Organ support should be discontinued

Quick info:
If the patient is not proceeding to organ donation, then organ support should be discontinued.

Reference:

17 Final act of care

Quick info:
The Final Act of Care will be carried out as per hospital policy.

18 Consider tissue donation

Quick info:
See attachment for detailed information on tissue (including eye) donation: Tissue and Eye Donation Information