Objective

The purpose of this document is to inform and guide the Specialist Nurse Organ Donation in requesting that relevant diagnostic imaging has been undertaken and reported.

Changes in this version

Change to SN from SN-OD.
Removal of reference to DBD donors only.
Additional wording to include DCD donors.
Inclusion of Scottish Legislation.
Specific requirements with regards CXR.

Roles

- **SN** – Specialist Nurse (Organ Donation) to request that appropriate diagnostic imaging is undertaken as part of donor characterisation (POL162) providing relevant rationale and background and reported on. The SN must ensure that this information is communicated to the relevant Recipient Centre Points of Contact as per MPD867

Restrictions

- This SOP is to be utilised by a qualified and trained SN. In the event of a SN who is in training, this SOP is to be utilised under supervision.

Items Required

- DonorPath access / EOS Mobile access.

Instructions

⚠ Caution

In Scotland only, Authorisation for Pre-Death Procedures (PDPs) is required for all DCD donors or donors where authorisation is gained prior to confirming Death by Neurological Criteria. ‘Type A’ are routine ICU tests and ‘Type B’ PDPs are invasive and less common diagnostic tests requiring additional Authorisation. New diagnostic tests must only be undertaken following the Duty to Inquire (DTI) in line with Scottish Legislation.

Electrocardiograms (ECGs)

1. Following confirmation of death using neurological criteria (DBD) or following consent to proceed with DCD heart donation:

1.1 Request the ECG once consent/authorisation for heart donation ascertained.

1.2 Inform the family why the ECG is being performed, if asked.

Post confirmation of death using neurological criteria ECGs are required by the RCPoCs for review by the implanting surgeons to help determine if a heart is suitable for solid organ donation.

2. Ask the medical practitioner to review the ECG.

2.1 Request a review of the ECG from the medical practitioner. The main points that the medical practitioner should consider are:

- Evidence of ischaemia
- Presence of Q waves

2.2 Request that the medical practitioner document their review of the ECG in the patient's medical records.

3. Upload the ECG report information onto DonorPath.

3.1 Add the report information to the Investigations section on DonorPath.

4. Where resources allow, secure email a copy of the ECG to the RCPoC.

4.1 Ensure that the email address is correct and secure. When sending any information via secure email, PID must not be displayed to ensure compliance with Policy on Handling PID. Utilisation of the ODT number can assist in maintaining security during transmission.

4.2 Telephone the RCPoC to confirm receipt of the ECG.

4.3 Document receipt of the ECG in Sequence of Events in Donor Path.

Echocardiograms (ECHO)

This section applies to **ALL** potential donors including donors proceeding with DCD Heart programme

5. Following confirmation of death using neurological criteria (DBD) or Following consent to proceed with DCD donation:

5.1 Ask the medical practitioner if an ECHO has been performed.

5.2 Ask when the ECHO was performed.

5.3 Ask if a report is available.

An ECHO performed days prior to confirmation of death using neurological criteria may not show a true picture of the function of the heart at the time of donation.

6. Has an ECHO been performed within the last 24 hours?

→ If No go to Step 7

→ If Yes go to Step 10

7. Ask the medical practitioner to request an ECHO.

7.1 Make this request following family consent/ authorisation for heart donation.

7.2 Inform the family why the ECHO is being performed, if required.

8. Will an ECHO be carried out following your request?

→ If Yes go to Step 9

→ If No go to Step 11

9. Ask the relevant medical practitioner if certain minimum information can be recorded.

9.1 Use **INF934** as a guide when speaking with the relevant medical practitioner.

9.2 Document all conversations held with the medical practitioner performing the ECHO, sign and date.

Core information is required by the RCPoCs/Implanting surgeons from the ECHO, to determine if a heart is suitable for transplantation.

⚠ Advice

If all of the information cannot be obtained, core minimum details should include: any evidence of ventricular hypertrophy or any structural abnormalities

10. Upload the information onto DonorPath.

10.1 Include all details reported by the relevant medical practitioner.

11. On occasions where an ECHO cannot be performed the SN should refer to MPD1382.

11.1 On any occasion where an ECHO cannot be performed the SN should refer to MPD1382, clearly documenting on Donor Path.

↻ CT & MRI Scans (including CT Angiograms)

⚠ Advice

This section applies to **ALL** potential donors

12. Ascertain from the patient's medical records if any CT and/or MRI scans have been performed during any recent hospital admissions.

12.1 Review the patient's medical records.

12.2 Determine if a CT/MRI scan has been performed.

12.3 Record the date of the CT/MRI scan.

CT and MRI scans may have been taken of various anatomical regions. These scans may provide detail about the quality and function of potential organs suitable for transplant – for example Thoracic and Abdominal CT scans.

13. Was a CT/MRI performed?

→ If Yes go to Step 14

→ If No go to Step 19

14. Was the CT/MRI scan reported by a specialist radiographer?

→ If No go to Step 15

→ If Yes go to Step 18

15. Speak with the medical practitioner to ask if a specialist radiographer is able to review the CT/MRI scan.

There may be cases in which specialist radiologists (neurological) have presented a second report on the initial scans which may provide more detail for the recipient points of contact.

16. Can a specialist radiographer review the CT/MRI scan?

→ If No go to Step 17

→ If Yes go to Step 18

17. Document on DonorPath that a specialist review of the CT/MRI scan will not occur.

17.1 Document conversations held with medical practitioner(s). – Reasons that a specialist review will not occur can include:

- if medical practitioner does not agree to refer to a specialist radiographer to review.
- if specialist radiographer does not agree to review.
- logistical/process issues that arise preventing specialist review from occurring.

18. Upload the relevant information onto DonorPath, including both medical entry reports and formal reports.

18.1 Include any details as reported by the: -

- medical practitioner.

AND/OR -

- specialist radiographer.

- The RCPoC will be able to relay this information to the implanting surgeons to inform decision making.

If a patient has not had a CT/MRI scan this does not preclude organ donation.

Chest X-Ray (CXR)

⚠ Advice

This section applies to **ALL** potential donors
Plain film x-rays should be reviewed and this information entered onto DonorPath if appropriate

19. Establish whether a CXR has been undertaken on the date of donation.

19.1 Ask the medical practitioner and/or nursing staff date of CXR. To ensure the safety and quality of organs for transplantation a CXR **should** be taken on the day of donation to identify any possible adverse findings (eg tumour, tuberculosis).

20. Has a CXR been taken today?

→ If No go to Step 22

→ If Yes go to Step 23

21. Following confirmation of death using neurological criteria (DBD) OR Following consent to proceed with DCD process, request a CXR to be taken:

21.1 Make this request following confirmation of consent.

Advice can be sought, if necessary, from relevant RCPoCs.

21.2 Inform the family why the CXR is being taken, if asked.

Advice

If a CXR has been taken within the past 48 hours, there may be no valid clinical reason to perform a further CXR. The medical practitioner has the final decision to authorise a CXR.

22. Will a CXR be taken today?

→ If Yes go to Step 23

→ If No go to Step 25

23. Ask the medical practitioner to review the CXR.

23.1 In circumstances where a formal radiological CXR Report is available on the hospital system this should be used. The SN should document in DonorPath that this is a formal radiology report.

23.2 If a formally reported CXR is not available the SN must request this, the formal report can be requested once the CXR is available. In circumstances where it is not possible to have a CXR reported on prior to organ offering, the SN should explore whether any admission CXR has been formally reported on and clearly document this on DonorPath.

23.3 In all other circumstances the SN must ask the medical practitioner to review the CXR. It is the responsibility of the SN to provide rationale for the review advising the medical practitioner that these results will help the RCPoCs and implanting surgeons. The SN should request medical practitioner comments on the following:

- To the best of their knowledge and ability determine if the lungs are suitable for donation to proceed noting any signs of infection or consolidation to the lungs.
- Determine to the best of their knowledge that there is no evidence of Tuberculosis or any other notable potential tumour / cancer by detailed review of the CXR.

  If there is any doubt, then expert advice should be sought from senior medical practitioners.

23.4 It is the responsibility of the SN to request that the medical practitioner clearly document their review of the CXR in the patient's medical records noting no evidence of the above as per 24.2.

24. Upload the relevant information onto DonorPath.

24.1 Include any detail as reported by the medical practitioner as well as the role/grade of the clinician reviewing the CXR. - The RCPoCs will be able to relay this information to the implanting surgeons to assist in the decision making process.

24.2 In circumstances where the SN requested a formal CXR report as part of donor characterisation which was not available prior to offering organs it is the responsibility of

the SN to ensure the findings of this report are followed up and communicated as per MPD881 and SOP4938.

25. Document on DonorPath reasons why CXR not performed within 48 hours.

25.1 Update DonorPath Communicate to RCPoCs as required as per SOP3948. - If a CXR is not performed on a patient, within 48 hours, this does not preclude lung donation.

⊖ End of Procedure

Definitions

- **SN** – for the purposes of this document the terminology 'SN' will apply to either Specialist Nurse or Specialist Practitioner with the relevant knowledge, skills and training in organ donation, working within NHSBT Organ Donation Services Teams (ODST)
- **Recipient Point of Contact** – Identified point of contact at transplant centre
- **DBD** – Donation following Brain Death
- **DCD –** Donation following Circulatory Death
- **CT –** Computerised Tomography
- **MRI** – Magnetic Resonance Imaging
- **ECG** – Electrocardiogram
- **ECHO** – Echocardiogram
- **Implanting surgeon** – to determine, following review of the information provided, that an organ is suitable for transplant for one of their recipients.
- **Relevant Medical Practitioner** – to undertake ECHO on patient and report findings
- **Imaging Diagnostic Tests** includes, but is not limited to, the following:
    - Plain film X Rays
    - CT scans
    - MRI scans
    - CT Angiograms
    - ECHO – trans thoracic/trans oesophageal
    - ECG
- **PID –** Person Identifiable Data
- **RCPoC** – Recipient Centre Point of Contact
- **Medical Practitioner** – to facilitate the radiological diagnostic test request and provisional reporting.
- **Specialist Radiographer** – to review any appropriate CT/MRI scans following referral from Medical Practitioner

Related Documents/References

- **MPD867** - Information to be communicated to recipient centres
- **POL162** - Donor characterisation
- **INF934** - Exemplar of Information to Request when an ECHO is being performed.
- **MPD1382** – Donation Pathway Communication Touchpoints – SNs, Hub Operations and RPoCs
- **MPD881** – Findings Requiring Additional Action
- **SOP4938** – Sharing Clinical Information
- **Human Tissue (Authorisation) (Scotland) Act 2019**
- NHSBT Guidance on Handling Person Identifiable Information:
  http://nhsbtweb/userfiles/22474%20Guidance%20of%20Confidential%20Comms%206pp%20DL.pdf
  http://nhsbtweb/userfiles/final%206%20IG%20proofs.pdf

Appendices