ALLOGRAFT VESSELS FROM CADAVERIC DONORS: PRESERVATION, USE AND DISPOSAL

PURPOSE
To develop a standardized procedure for the preservation, use, and disposal of allograft vessels obtained from cadaveric organ donors. Allograft vessels are used as vascular grafts for transplant recipients during the implantation or post implantation phases.

POLICY
1.0 Indications for using cadaveric donor allograft vessels.

1.1. Allograft vessels are harvested from the cadaveric organ donors for possible graft placement during the transplantation procedure or during the postoperative period, i.e., patients brought back to the Operating Room for arterial or venous thrombosis.

1.2. The surgeon will verbally order the use of the stored allograft vessels as indicated (see 6.0)

2.0 Harvesting of allograft vessels from cadaveric donors.

2.1. Allograft vessels are obtained from the donors by the harvesting team and placed in a sterile specimen cup containing Belzer’s solution.

2.2. The specimen cup containing allograft vessels are labeled with the following information:

1. UNOS identification numbers
2. Donor blood type, Age
3. Harvest date

2.3. The labeled, sterile specimen cup with the allograft vessels is placed in the transport cooler along with the liver.

2.4. Once brought to the Department of Operating Room Services, such specimen cup will remain in the designated operating room until it is requested for the transplant recipient or until the end of the case at which time will either be prepared for storage or sent to Pathology.

3.0 Use of the allograft vessels during transplantation
3.1. If the allograft vessels are needed during the transplantation procedure, the sterile specimen container is aseptically opened and the vessels are poured into a basin on the sterile field using aseptic technique.

3.2. When the allograft vessels are placed on the field and not used, they can be saved and stored as per policy only for that specific patient for the remaining duration of the initial 14-day period.

4.0 Temporary storage of vessels not used during transplantation

4.1. If the allograft vessels are not needed during the transplantation procedure, the specimen cup containing the allograft vessels would be prepared for temporary storage in the monitored Operating Room vessel/tissue refrigerator located in the refrigeration room.

4.1.1. The specimen cup should be inspected by the circulating nurse for integrity and proper labeling. Specimen cup must be labeled with recipient patient sticker.

4.1.2. The specimen cup containing the allograft vessels should be placed in a clear zip lock specimen bag.

4.1.3. The specimen cup will have a sticker with serology test results on it, per UNOS requirement. Do not remove the sticker.

4.1.4. This bag should be placed in an appropriately sized tamperproof sterilization peel pouch. Another label containing the recipient’s name, age, blood type, UNOS #, cross-clamp time, CN initial and harvest date is to be placed on the outside of the peel pouch.

4.1.5. Enter the following information on the Allograft Vessels Log Book sheet.
1. Donor’s UNOS#
2. Donor’s age
3. Donor’s blood type
4. Harvest date
5. Cross clamp time
6. Date placed in refrigerator
7. Circulating nurses initials
8. Add recipient patient’s label

4.1.6. The labeled allograft vessel pouch should then be placed in the monitored Operating Room vessel/tissue Refrigerator at a temperature range between 2C - 8C by the circulating nurse.

4.1.6.1. The Operating room vessel/tissue Refrigerator is monitored for temperature and storage conditions on a continuous basis.
4.2. Monitoring of allograft vessel storage: The Operating Room Liver Coordinator or designee will check the specimen cup/bag integrity and expiration date daily.

4.3. Expiration date is fourteen (14) days from the date of harvest.

4.3.1. All expired allograft vessels must be sent to Pathology

4.3.1.1. The “Organ Disposition Form” should indicate UNOS #’s of each expired container or write “Allograft vessels– unnecessary tissue, please dispose of”

4.3.1.2. A copy of the completed Allograft Vessel logbook form will be placed in the transplant services QA manager’s mail folder at the front desk mail room for pick up.

5.0 Contraindications for allograft vessel preservation and storage.

5.1. Any break in aseptic technique during harvesting, transport, or transplantation phases.

5.2. Atherosclerotic allograft vessels. It is the responsibility of the harvesting physician to communicate this to the circulating nurse.

5.3. Donor patient infectious disease.

5.4. Any positive serology tests that are reported after the implantation phase. It is the physician’s responsibility to communicate this to the Operating Room Liver Coordinator.

6.0 Protocol for using stored allograft vessels as grafts.

6.1. Per physician’s request, the circulating nurse obtains the appropriate vessels.

6.1.1. Whenever possible, allograft vessels matching the original cadaveric donor should be used.

6.1.1.1. This is determined by the name on the specimen cup.

6.2. The circulating nurse aseptically dispenses the vessels into a basin on the sterile field.

6.3. After the vessels are introduced to the sterile field, the scrub nurse will
culture swab the vessel and pass the swab off to the circulating nurse for culture and sensitivity per routine protocol.

6.4. The vessels should be soaked in a basin of amphotericin 25mg/1000cc sterile water for 5 minutes, then Duobiotic for 25 minutes (if time permits) before grafting.

6.5. Any excess vessels remaining after grafting must be sent to Pathology (see Exception 3.2)

6.5.1. The specimen cup should be labeled with the recipient’s label/sticker.

6.5.2. Use the Organ Disposition Form as in 4.3.1.1

7.0 Documentation

7.1. When an allograft vessel is used, the circulating nurse should complete the “Allograft Vessel Graft Logbook,” located in Operating Room 16.

7.2. The following information must be entered into the Log Book:
1. Patient’s label
2. Surgeon’s name
3. Date of procedure
4. Donor patient’s age
5. Donor’s UNOS identification number
6. Donor patient’s blood type
7. State if remaining vessels sent to Pathology

7.3 Peri-operative nursing record documentation:
7.3.1. In the procedure comments: Allograft vessel UNOS # and ABO
7.3.2. Count screen: Prior to implantation
7.3.3. Count type: UNOS # and ABO checked with names

DOCUMENTATION
Allograft Vessel Graft Log Book

FORMS
Organ Disposition Form

REFERENCES
JCAHO Standard Title 22
UNOS policy
REVISION HISTORY
Effective Date: 1/95
Review Date: 4/98, 2/01, 4/04, 10/07, 3/08
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APPROVAL

Director of Main Operating Room Services