



THE JOURNEY OF A RECOVERED CARDIOVASCULAR HOMOGRRAFT

From the recovery to the release of homograft, the safety and standards of the homograft depend on various healthcare professionals such as the Transplant Coordinators, Medical Laboratory Technologists, Nurses, Medical Directors and Cardiothoracic Surgeons.

1 SCREENING, CONSENT AND RECOVERY OF HOMOGRRAFT

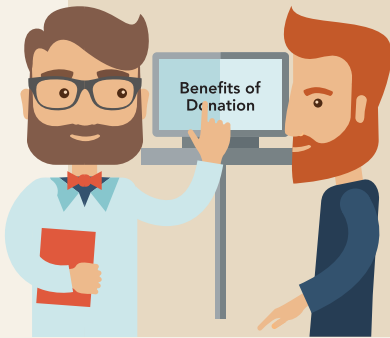
SCREENING AND CONSENT OF HOMOGRRAFT

When the Transplant Coordinator is notified of a death, he/she will verify on the Organ Donor Registry that the potential donor is not an objector before approaching the potential donor's next-of-kin (NOK) to share the option of tissue donation.

With the NOK's consent, the Transplant Coordinator will screen the suitability of the potential donor through his/her medical records and social history for any risk of transmissible diseases (HIV, Hepatitis B, Hepatitis C, syphilis, autoimmune diseases and cancer).



The conversation with the donor's family will cover the description of the tissue donation process, the benefits of donation and how it can save the lives of others as well as the reassurance that the funeral arrangements will not be unduly delayed because of the donation.



RECOVERY OF THE CARDIOVASCULAR HOMOGRRAFT

When an altruistic consent for donation has been made, the respective healthcare professionals involved are notified and blood is drawn from the donor.

Recovery of the homograft shall take place within 15 hours from the time of death. The recovered homograft is placed in media and transported to the National Cardiovascular Homograft Bank's laboratory.



2 PROCESSING AND QUALITY CONTROL OF CARDIOVASCULAR HOMOGRRAFT

PREPARATION

The dissection of the recovered homograft is performed by the Medical Director inside a laminar flow hood. While the dissected homograft is soaked in a combination of antibiotics for 24-32 hours at a low temperature (2-8°C), samples of the dissected homograft are sent for microbiological and histopathological testing.



CRYOPRESERVATION

After disinfection, each homograft is individually packed into a pouch with cryopreservation solution and frozen down at a controlled rate. The cryopreserved homograft is first stored in a quarantine liquid nitrogen storage tank until approved for clinical use by the Medical Director of the tissue bank. Cryopreserved homografts have a shelf life of 5 years.

QUALITY CONTROL

The blood test, histopathology and dissected tissues' microbiological results are reviewed by the Medical Director. The tests that are performed include:

- Microbiology:
 - Aerobic bacteria
 - Anaerobic bacteria
 - Fungi
- Serology: Screening of the donor for transmissible disease
 - Hepatitis B
 - Hepatitis C
 - AIDS
 - Syphilis
- Histology: Examination of tissue dissected
 - Myocardium
 - Aorta



3 FINAL VALIDATION

The Medical Director of the tissue bank, after having obtained all necessary results, will review the conformity to the regulations and requirements of the AATB Standards before releasing the homograft for clinical applications.

