



Tissue donation in Scotland

It is not well known that tissue can be donated after cardio pulmonary death. Examples of the tissues that can be donated in Scotland are: skin, heart valves, tendons and eyes.

Unlike the immediacy of retrieval in cases of organ donation, tissues may be retrieved up to 48 hours after death and be stored for long periods of time in the approved Tissue Banks.

Donated tissue is used to greatly improve the quality of life for many people. It is described as being life enhancing rather than life saving. Therefore it is subject to the same rigorous regulatory control with regard to safety as blood and blood products.

Who will benefit from tissue donation?

In **Heart Valve** donation, the whole heart is removed and the aortic and pulmonary valves are dissected out. Homograft heart valves are used to repair congenital heart defects in children and young adults and to correct acquired diseases of the heart valves in adults.

Tendons: retrieved Patellar and Achilles tendons are used to repair damaged ligaments, most commonly the cruciate ligament in the knee. The most frequent use is for traumatic injury to the knee where long-term mobility is in question

Skin grafting is used as immediate first line management in severe burns.

Corneas can be transplanted into patients suffering from severe eye disease or injury. Sometimes the sclera is also transplanted during reconstructive surgery.

Who can donate?

There are specific exclusion criteria set within the UKBTS National Donor Selection Guidelines. These are generally set in order to protect potential recipients, on the premise that tissue transplant is classed as life enhancing not life saving.

Age range:

- 3 months – 65 years for heart valves
- No age limit for corneas
- 17 – 60 years for tendons
- 17 – 65 years for skin

Clinical exclusions:

- Untreated systemic infection
- History of malignancy (* may be exception for corneal donation, as below)



- History of chronic viral hepatitis or HIV infection
- Diseases of unknown aetiology (eg MS, Crohn's Disease)
- Active multi-system autoimmune diseases
- Active chronic infection
- Risk factors for CJD or variant (dementia)
- Immunosuppressant therapy

***Specific to corneal donation**

Not all malignant disease is contraindication to corneal donation, those which DO contraindicate are:

- Leukaemia, lymphoma, myeloma, retinoblastoma, malignant tumours of the anterior segment

Retrieval Process

In the case of multi-tissue donation, the tissues are retrieved by specialist personnel in the Tissues & Cells Directorate designated donation suite at the Western General Hospital in Edinburgh or in dedicated mortuary facilities in Glasgow. Families are asked for permission to transfer the deceased for the donation process to take place. The deceased is returned after the retrieval procedure is completed. The retrieval procedure does not interfere or delay with Post Mortem or the funeral.

In the case of corneal donation, the eyes are retrieved by specialist personnel working within hospital mortuaries or Ophthalmic services. On occasion families are asked for permission to transfer the deceased to a designated mortuary for the donation process to take place. The retrieval procedure does not interfere or delay with Post Mortem or the funeral.

How to contact the teams

The Organ Donation and Tissues teams both offer 24/7 access for guidance, advice and referral.

The Specialist Nurse for Organ Donation (SN-OD) on call is contacted by radiopage: **07659594979**

The Tissue Donor Co-ordinator on call is contacted by radiopage: **07659 107 029**

Eye donation may be facilitated in any area of Scotland.

For logistical reasons, multi-tissue donation is presently accessible only in the Central Region in Scotland.