SKIN DONATION / TRANSPLANTATION

Tissue Donation Facts:

• Every death referred to OneLegacy is evaluated as a potential tissue donor.
• One tissue donor can enhance and save over 50 people.
• Over 1,000,000 people are helped annually with tissue transplantation.
• Skin is one of the tissues recovered for transplantation and many hospitals utilize skin for various procedures.
• An open casket funeral is possible after tissue donation.

Skin Recovery:

• Skin recovery takes 1-1.5 hours.
• Skin is recovered from larger surface areas, such as the back and thighs.
• Skin will be recovered as either a thin layer (partial-thickness) or a full-thickness skin graft. The thin layer includes the epidermis layer and a small percentage of the dermis and the full-thickness includes all 3 layers of the skin and can include some subcutaneous fat.
• With full-thickness grafts the body will heal faster and with less pain in certain surgeries.

Skin storage:

• Skin can be stored fresh for up to 14 days
• If skin is cryopreserved within 72 hours of recovery and maintained at -70°C, it can last up to 5 years

Skin usage:

• Skin for skin-grafts need not be matched to the recipient as it sloughs off once the pt’s skin regenerates.
• Burns - Increases burn survival by 17% to 77%, promotes healing of pt’s own skin, provides a temporary coverage to protects against infection and loss of fluid and heat, decreases pain.
• Abdominal wall reconstruction - i.e. hernia repairs.
• Breast reconstruction - post-mastectomy. Promotes rapid revascularization, white cell migration and cell re-population, supporting tissue regeneration and ultimately transforming into host tissue.
• ENT surgeries - e.g. facio-maxillary reconstruction, parotidectomy, injection laryngoplasty.
• Tunneling ulcers - use of particulate acellular dermis - a processed form of skin, infected into the tunneling ulcer and promotes healing and closure of the ulcer.

Risks of Skin transplant:

• Bleeding, infection, loss of grafted skin, nerve damage, graft-vs-host disease

Skin transplant example:

A police officer who slipped and fell in the shower and lay under the scalding hot shower for hours, developed 3rd degree burns. He received a processed dermal graft derived from full-thickness skin grafts to his back/shoulder.

2.5 years post-skin grafting, the burn has fully healed and the patient has regained full range of motion.

24-Hour Referral of all Imminent Brain Death and Cardiac Deaths should be made to

1-800-338-6112

References:  http://en.wikipedia.org/wiki/Skin_grafting, OneLegacy education material