Organ, Eye, & Tissue Services

Preservation and Allocation / Distribution of Organs & Tissues

The heart, liver, kidneys, lungs, pancreas, and intestine are all referred to as life saving solid organs. The organs are flushed with a cold preservation solution, Viaspan. Once recovered from the donor the organs are stored in Viaspan, packaged in sterile containers, and sent to the recipient hospital for transplantation. The preservation time (time from recovery to transplant) is different for each organ. Preservation time for the heart and lungs is 4 to 8 hours. It is 8 to 16 hours for the liver, pancreas, and intestine. The kidney’s preservation time is 24 to 48 hours. If the kidney is placed on a kidney pump, preservation time can be increase to 72 hours. Organs are allocated through a national waiting list. Upstate New York Transplant Services is a member of United Network for Organ Sharing (UNOS), the organization designated by the federal government to maintain the national waiting list.

The most commonly transplanted portion of the eye is the cornea. The cornea is the dome shaped clear area over the colored part of the eye. It must be transplanted to a recipient within ten days of the donation. The sclera (the white part of the eye) can be transplanted up to one year after the donation. In some cases donated eyes and corneas are frozen for storage. This allows surgeons to transplant the tissue up to one year later. UNYTS is accredited by the Eye Bank Association of America (EBAA), a national organization that sets standards for eye donor screening, recovery and distribution. As a result of the generosity of the people of Western New York, UNYTS exports approximately 60% of the corneas that are recovered here. When there are corneas that need to be matched with a recipient, a UNYTS coordinator works closely with surgeons to meet the needs of the local community. Once this is accomplished and there are additional corneas, the UNYTS coordinator searches for a recipient throughout the state, the country and even the world. UNYTS is proud to say that it has been able to help provide the gift of sight to the local community as well as to a number of recipients in Europe, Taiwan, and even Malaysia.

The bone and some soft connective tissue are sent to a for-profit company named Regeneration Technologies, Inc. (RTI) located in Alachua, Florida for processing. The bone is fashioned into many different sized and shaped grafts and is either freeze dried or frozen. This enables the tissue to be used up to several years after the donation so that just the right graft is used in each tissue transplant. The cardiovascular tissue is sent to a for-profit company named Cryolife, Inc, in Kennesaw, Georgia. These tissues are cryopreserved which also allows the tissue to be used up to several years after the donation. UNYTS works very closely with its tissue processing companies to ensure that local surgeons can implant bone and other tissue from Western New York donors. As with cornea donation, once the local need is met the remaining tissue grafts will be used to help individuals throughout the country.