Tissue transplants play a vital role in improving quality of life

Sandra Venter PRO – Centre for Tissue Engineering



o leave a lasting legacy is probably one of the most deep-seated human desires. Hence, giving part of oneself through organ and tissue donation is a gift that never ceases to yield rewards. Unlike a gift voucher that eventually gets used up, this is a gift that becomes part of another person's life." This is the opinion of Cleo Ndhlovu, manager of the Tshwane University of Technology's Centre for Tissue Engineering (CTE) in Pretoria.

Although there is little awareness about tissue donation, tissue transplants play a vital role in improving the quality of life for ordinary South Africans. Tissue refers to bone & tendons, cornea, skin and heart valves and provides healing opportunities for patients who suffer from skeletal conditions, repairing the sight of people who may otherwise suffer permanent blindness, saving the lives of burn victims and providing treatment options for people with congenital heart defects.

Donors come from all walks of life, but unfortunately only a small segment of the South African population are currently registered as donors. This may be due to cultural and religious factors, but sadly, a lack of information is still a big problem. "In addition to our own efforts to educate the public on the responsibility of becoming donors, tissue banks are now working even closer with the Organ Donor Foundation (ODF), to reach people of all communities and to provide them with information to understand the benefits of donation" says Cleo.

A new formal agreement for the promotion of tissue donation will allow for more integrated and centralised marketing and advertising campaigns to create awareness of the vital services tissue banks provide. In addition, the logistics of liaising with donor families, referring potential donors, as well as registering to become a donor, will be centralised in one database in future.

Need for a skin banking programme

The CTE is a human tissue bank that procures, processes and distributes human tissue for transplantation. Over the past five years, the CTE has been inundated with pleas from surgeons and burn units around the country to assist with the banking of skin for the treatment of burn victims. The majority of patients who require skin are state patients, who are more often than not the victims of shack and veld fires that frequently result in life threatening burns. "Although there are no financial advantages to be gained through skin procurement and distribution, the CTE and Bone SA felt morally obliged to make a financial commitment and take on the challenge to help these ordinary South Africans," says Cleo.

Answering the call

The launch of the first skin banking programme in South Africa in April 2016 was a notable highlight for the CTE. The programme is aimed at alleviating the dire need for skin to treat burn victims and prevent the death of victims. These deaths occur not only because of the severity of the burns, but because there are no effective, affordable synthetic treatment options available to patients in state hospitals.

According to the Burn Society, there are 268 new serious burn cases reported every month, of which about 160 are children. The best solution to this problem is cadaveric human skin. Only a few strips from the very top layer of skin can be procured from organ and tissue donors, which can then be used very effectively on burn victims.

Although there are a number of transplant centres, as well as eye and tissue banks around South Africa, there has never been a successful long-term skin-banking program.

The treatment of burns with cadaveric skin has a number of advantages for the recipient. The treatment process is far less traumatic and painful than treatment with synthetic dressings, less scarring occurs and the cost saving is massive.

Call to register as organ and tissue donors

One of the biggest challenges in providing skin — and all other types of tissue - in adequate quantities is the shortage of organ and tissue donors. Every person in South Africa can make a difference, and the appeal goes out to all members of the public to make a decision in favour of donation after their death.

There is no cost involved for the donor and/or his family and tissue can be successfully retrieved even days after the death occurred.



To register as an organ and tissue donor please visit www.odf. org.za or call the toll-free number at: 0800 22 66 1

