Postmortem tissue and organ donation

Sir,

Many lives are saved nowadays by blood transfusion. We, doctors can play a great role in motivating people we come across for blood donation. Like blood other tissues can be donated, but often only after death. Postmortem tissue and organ donation is widely practiced in the developed countries of North America and Europe. We are lagging far behind.

Eye donation is gradually gathering momentum in our country. Thanks to some of the eye surgeons and Sandhani who took an active interest in the campaign for eye donation. Eye donation is a postmortem procedure. Previously eye (cornea) procurement in our country was done mostly from unclaimed dead bodies. For ethical and medico-legal reasons cornea is now harvested from deceased donors.

Postmortem organ donation (e.g. kidney) requires finding a suitable brain dead donor in an ICU with technical facilities for organ harvesting. Tissue donation from deceased donors does not need a brain death in an ICU setting. Rather, after cardiac death (normal death) tissues can be harvested from the donor by a surgical team using a clean OT, provided that the procedure takes place within a short time, and the deceased donors body should preferably be preserved in a cold mortuary at 50°C before harvesting tissues to be utilized as allografts.

In addition to cornea and sclera many tissues can be harvested nowadays for clinical use. The list includes- bone, cartilage, tendon, fascia lata, skin, heart valves and so on. Tissue allografts are used by surgeons to replace damaged or lost tissues of recipients. After harvesting these tissues need to be processed and preserved properly by a tissue bank. We are fortunate to have a sophisticated tissue bank at the Atomic Energy Research Establishment in Savar. Our tissue bank is processing bone and amnion at present and has the potentiality of processing many other tissue allografts.

To improve the supply of tissue allografts and organs for transplantation in our country we need to promote postmortem tissue and organ donation. Postmortem donation of tissue, organs or the body for the benefit of fellow human beings is an act of greatest charity. Doctors have many scopes for motivating people for this noble act. Technically, availability of cold mortuary at every large hospital and at all district hospitals will enable tissue allograft procurement. The Organ and Tissue Donation Act of 1999 has established the legal framework for procurement, processing and utilization of tissues and organs from human donors in our country. Social activists, eye banks, tissue banks and intellectuals should come forward to popularize postmortem tissue and organ donation. But, doctors should take the lead.

Dr. Shakeel Akhtar
Senior Consultant in Orthopaedic Surgery, Uttara Adhunik Medical College Hospital, Dhaka.
&
Joint Secretary, Bangladesh Tissue Banking Association