

surgical operation in which a failure or damaged organ in human body is removed & replaced with functioning one

# Organ transplantation

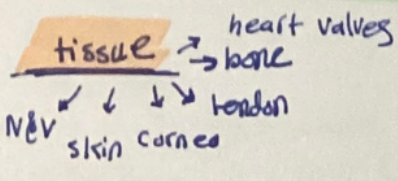
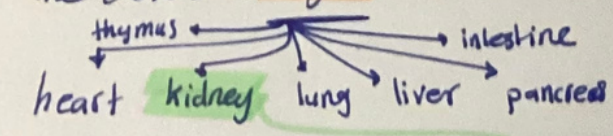
1st discussion was on starting

The donated organ may be from   
 deceased donor   
 living donor   
 animal.

blood transfusion   
 early 20th century

The need

- No alternative method of treatment
- No harm or damage to donor
- Consent of donor
- under medical supervision.
- The donor should be clinically free from a transmissible disease.



the most commonly transplanted organ   
 kidney, liver, heart

- # The major clinical problems include
- tissue rejection
  - organ preservation
  - insufficient facilities & man power
  - high cost of operation
  - restriction of law

- Autologous b.t.   
 intraoperative autotransfusion   
 shed blood is collected from operative field & mixed with anticoagulant

- Erythropoietin   
 use of erythropoiesis stimulating ~~pro~~ proteins for the treatment of chemotherapy-induced anemia

## Sources of organ

### Cadaveric organ donation

- from deceased people.
- they would like to be donor when die.

### Living organ donation

from living people.

donor should be related to recipient - up to 3rd degree

donate

- one-half kidney
- portion - partion of liver, - lobe of lung

### Importance of brain death

irreversible cessation of all brain function including brainstem   
 damage => permanent.

# Modern resuscitative devices & techniques can maintain the function of heart, lungs, & visceral organs for a period of time after the brain stem center have stopped.

- ### Types
- Auto-transplantation
  - Isograft
  - Allo-transplant   
 most common
  - Xenograft   
 heart valves

### Medical criteria of brain death

- know cause of coma [structural brain damage]
- Exclusion of reversible causes of coma as toxic or metabolic
- No hypothermia, temp > 35
- absent brain stem reflexes
- no motor response within cranial Nerves
- No papillary response to light
- no corneal reflex
- no oculovestibular reflex
- no oculoccephalic reflex
- no gag reflex
- no eye eversion

### Stem cells

- Can give rise to   
 blood cells   
 MS cells   
 N cells   
 Heart cells
- glia   
 Parkinson's disease.