

Principles of Transplant

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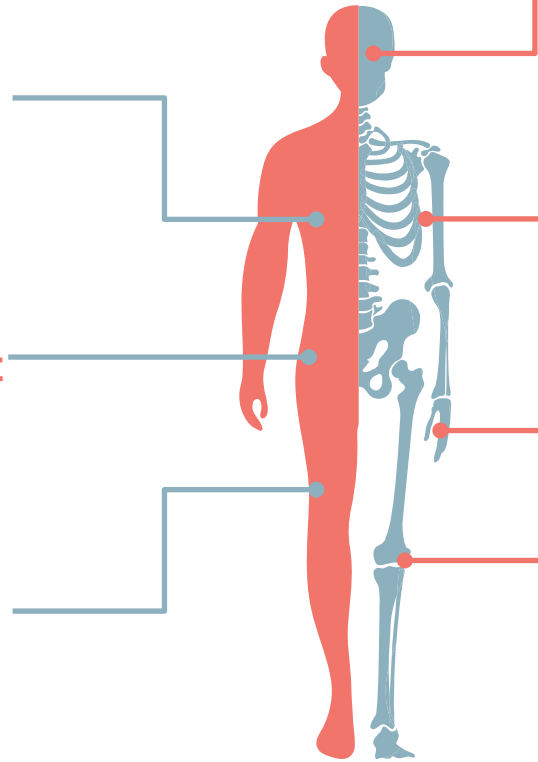
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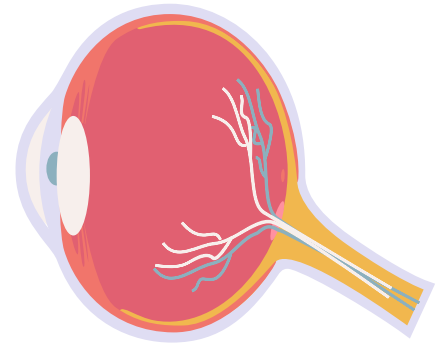
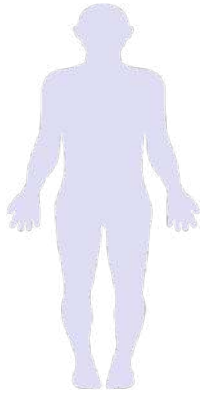
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Introduction

A transplant is a surgical procedure needed when an organ fails in a patient between (recipient) and (donor).

the first successful human corneal transplant, a corneal grafting operation, was performed by Eduard Zirm, in 1905.





Define organ transplant

Transplantation refers to the act of transferring cells, tissues, or organs from one site to another. the tissue or organ transplanted is known as the transplant or graft. the person who is giving the healthy organ is called the donor. the person who is receiving the healthy organ is called the recipient.

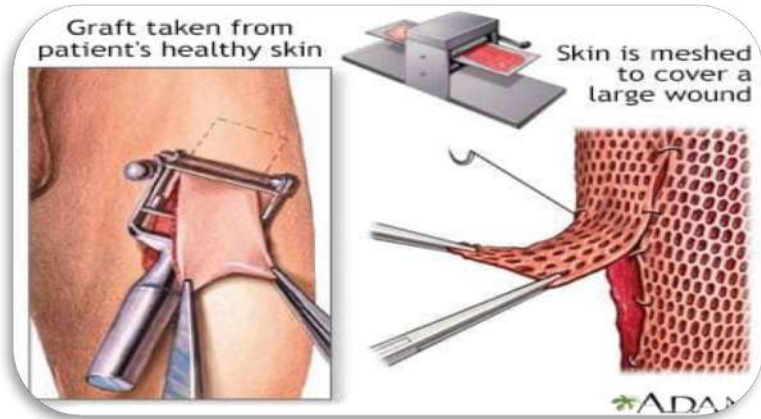


Types of transplant



Autograft

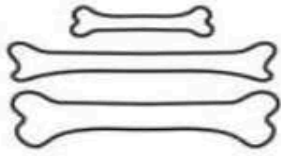
Autograft is self-tissue transferred from one body site to another in the same individual.



Isograft

Isograft is tissue transferred between genetically identical individuals. In humans, an isograft performed between genetically identical (monozygomatic).



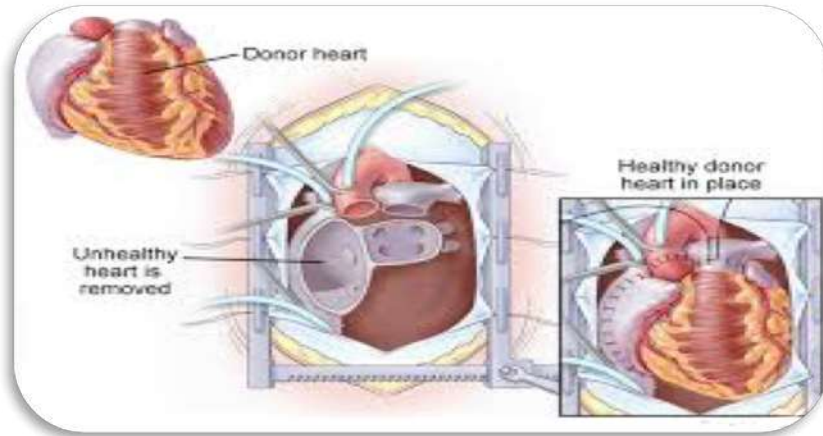


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Types of transplant

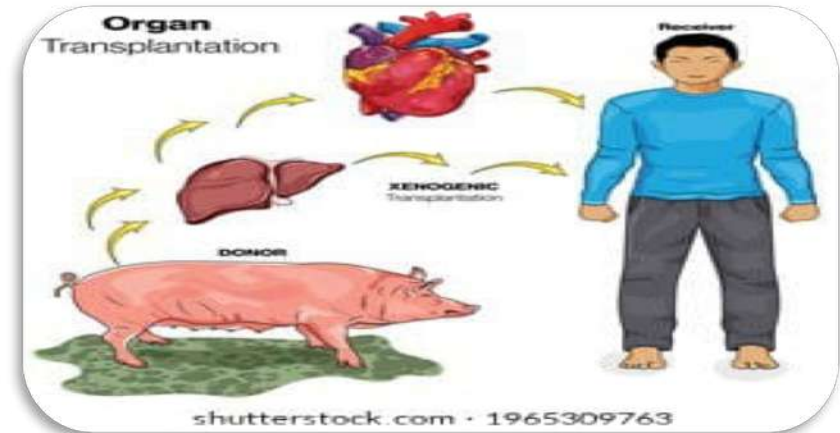
Allograft

Allograft is tissue transferred between genetically different members of the same species.



Xenograft

Xenograft is tissue transferred between different Species.



Examples of organ transplant

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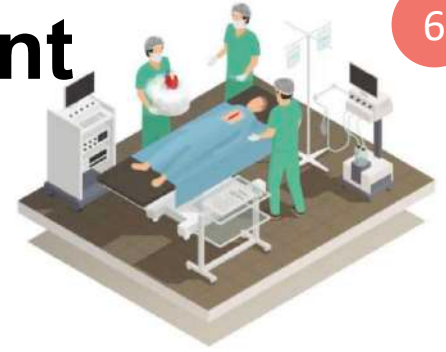
The organs that can be transplanted include:

Heart , Intestine, Kidney, Liver, Lung and Pancreas

Doctors must match donors to recipients to reduce the risk of transplant rejection. Rejection happens when your immune system attacks the new organ.

Interesting story

In 1984, a baboon heart was transplanted into a newborn infant, Baby Fae, who had hypoplastic left heart syndrome and lived 20 days after heart surgery.





Possible Risks after transplant

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- Organ transplants require surgery. These surgeries are always dangerous.
- There are substantial risks of organ transplants. It is possible a surgery can go wrong.
- A particular body can reject an organ.
- There can be side effects after the procedure is done and a new organ doesn't always assure a better life.
- There are case studies where people have died even after a successful organ transplant.





Management after transplant

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Immunosuppressants are drugs or medicines that lower the body's ability to reject a transplanted organ. Another term for these drugs is anti-rejection drugs. There are 2 types of immunosuppressants:

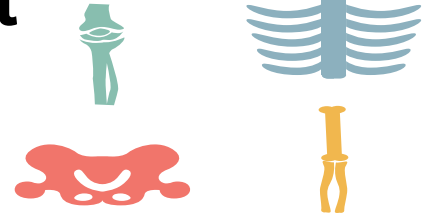
Induction drugs: Powerful antirejection medicine used at the time of transplant.

Maintenance drugs: Antirejection medications used for the long term.





Management after transplant



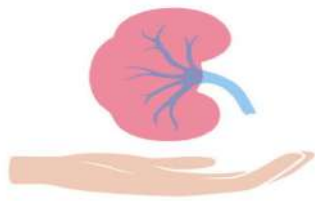
There are usually 4 classes of maintenance drugs:
Calcineurin Inhibitors: Tacrolimus and Cyclosporine

Antiproliferative agents: Mycophenolate Mofetil, Mycophenolate Sodium
and Azathioprine

mTOR inhibitor: Sirolimus

Steroids: Prednisone





Summary

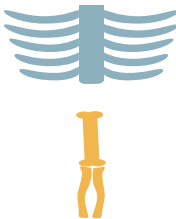
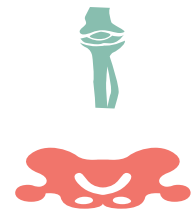
- Transplant is a surgical procedure in which tissue or an organ is transferred from one area of a person's body to another area.
- Transplant have many types such as Xenograft.
- The organs that can be transplanted include: Heart , Intestine, Kidney, Liver, Lung and Pancreas
- Immunosuppressants are drugs or medicines that lower the body's ability to reject a transplanted organ.





References

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Thanks !

Do you have any questions?