



SNS COLLEGE OF NURSING

SARAVANAMPATTI, COIMBATORE-35

DEPARTMENT OF NURSING

COURSE NAME : BSC (N) II YEAR

SUBJECT : MEDICAL SURGICAL

NURSING

UNIT VII: RENAL TRANSPLANTATION



INTRODUCTION



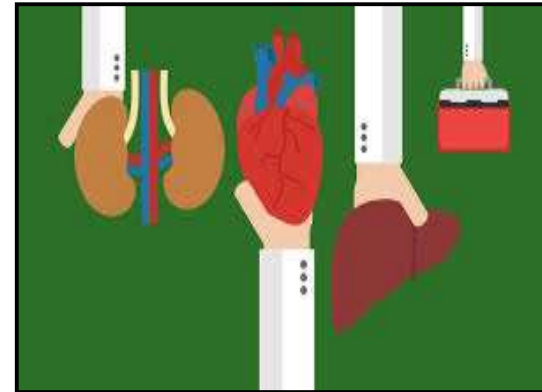
- Kidney transplant provides better long- term survival and improved QOL.
- Patient survival and transplant success has been progressively improving over the years.
- Kidney transplant is the treatment of choice for End Stage Renal Disease (ESRD) in eligible patients.



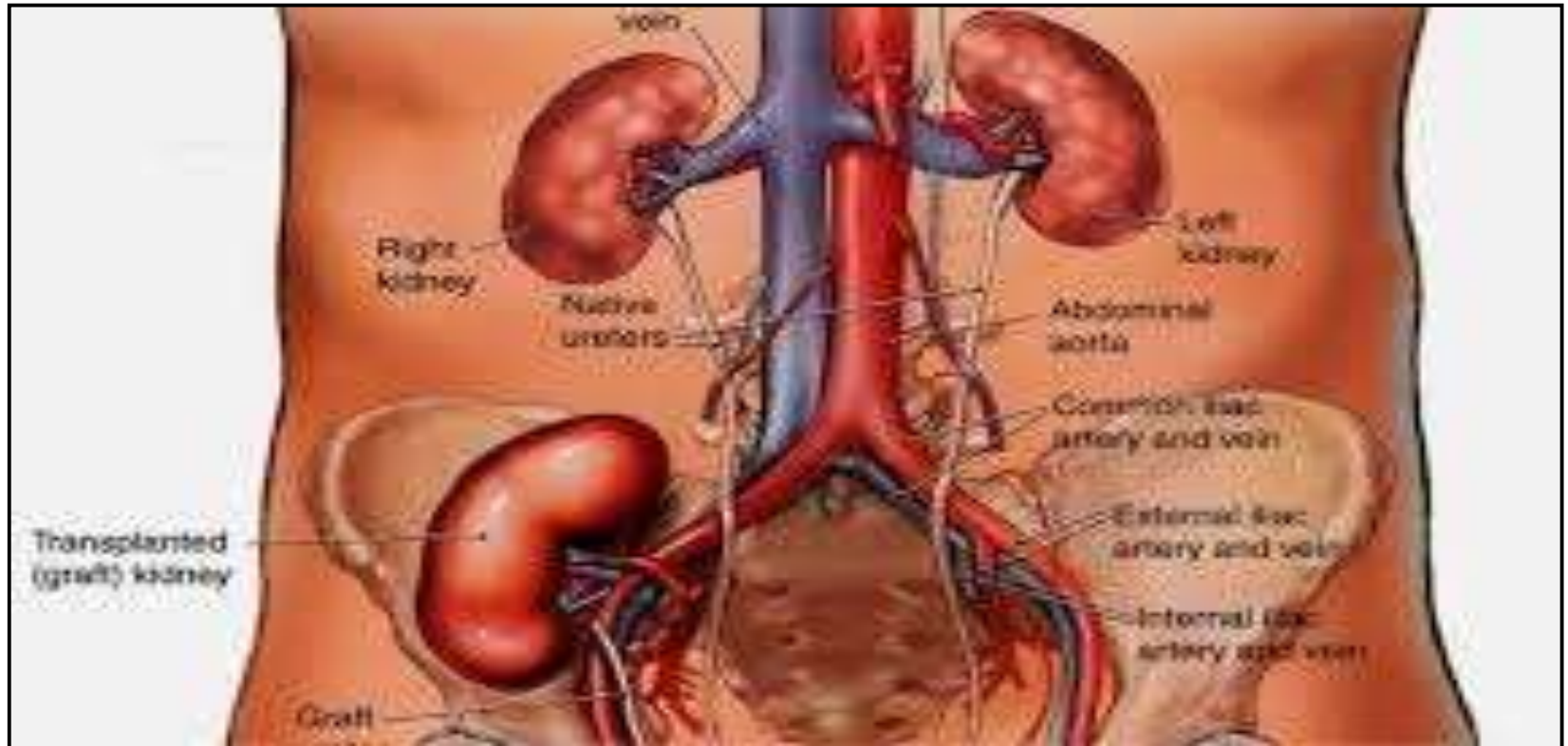
ORGAN DONATION



Organ donation is the process of surgically removing an organ or tissue from one person (the organ donor) and placing it into another person (the recipient).



KIDNEY TRANSPLANTATION





What organs and tissues can be transplanted?

- Organs and tissues that can be transplanted include: Liver ,Kidney ,Pancreas ,Heart ,Lung Middle ear ,Skin ,Bone , Bone marrow, Heart valves Connective tissue, vascularized composite allografts (transplant of several structures that may include skin, bone, muscles, blood vessels, nerves, and connective tissue)



FACTS ABOUT DONATION



- ❖ The decision to donate the organ is based on the strict medical criteria and law.
- ❖ Tissues such as cornea, heart valves skin and bones can be donated in case of natural death but vital organ such as heart, liver, kidney, intestine, lungs and pancreas can be donated only in case of “brain death”.



FACTS ABOUT DONATION



- ❖ Organs such as heart, pancreas, liver, kidney, and lungs can be transplanted to those recipients whose organ are failing, because it allows many recipients to return to normal life style.
- ❖ Anybody can be an organ donor irrespective of their age, gender, caste, religion, and community. However, anyone younger than 18 need to have agreement of parents or guardian to be a donor.



TYPES OF KIDNEY DONORS



Living Donors

- 1.Genetically related(living-related)
- 2.Non-related(living-unrelated)

Deceased Donor (Formerly known as cadaveric)

- 1.Brain dead or “ beating heart” donors are considered dead but the pumping heart continues to perfuse the other organs.
- 2.Donation after cardiac death are elective donation of organ by patient himself or the relatives to withdraw life support as they have slim chances of survival.



INDICATION



ESRD GFR less than 15ml/L.

- Malignancy.
- Hypertension.
- Diabetes mellitus.
- Genetic diseases- polycystic kidney diseases.
- Metabolic disorders.
- Chronic renal failure (crf)



CONTRAINDICATIONS



Cardiac and pulmonary insufficiency.

- Hepatic diseases.
- Concurrent tobacco use and morbid obesity puts the patient at risk for surgery.
- HIV.

BENEFITS AND RISKS

Benefits: –

- Significantly reduced risk of mortality.
- Life expectancy can triple.
- Reduced risk of heart attack, stroke, heart failure.
- Reduced infection-related hospitalization.
- Improved quality of life.
- More likely to stay employed.



RISKS



Acute rejection or failure (less with current meds).

- Anti-rejection medication effects:
- Infection.
- Some malignancies, ex/skin cancer.
- Increased risk of diabetes, high blood pressure, high cholesterol.
- Graft loss over time.
- Overall in eligible candidates, the benefits far outweigh the risks.



COMPATIBILITY



- ❖ The patient has to be ABO compatible.
- ❖ The recipient should share as many as HLA antigens and minor antigens as possible.
- ❖ Immunosuppressant drugs are given to prevent antibody reactions.
- ❖ Perform antibody test on potential recipient





RECIPIENT SELECTION



- Very few contraindications.
- General medical condition.
- Cardiovascular screening.
- Age-appropriate routine cancer screening (pap smear, mammography, colonoscopy, PSA).
- Infection (HIV, Hepatitis, TB). Presence of preformed antibody (PRA).



PREPARING DONAR AND RECIPIENT FOR A KIDNEY TRANSPLANT



Donor and recipient matching can be divided into three distinct areas:

- 1) Blood group matching
- 2) Tissue type matching
- 3) Cross matching. It applies to living kidney donation and deceased kidney donation.



NURSING CARE



PRE OPERATIVE CARE:

- Provide routine pre operative care.
- Assess knowledge & feelings about the procedures.
- Addressing concerns and reducing preoperative anxiety improve post operative recovery.
- Continue dialysis as ordered.
- Administer immunosuppressive drugs as ordered before surgery.it helps to prevent immediate graft rejection.

Post operative care:

- Provide routine post operative care.
- Maintain urinary catheter patency.
- Measure urine output every 30-60 mts initially.(oligria is an early sign of acute tubular necrosis)
- Monitor vitals
- Maintain fluid replacement.it helps to maintain vascular volume & tissue perfusion.
- Administer diuretics.



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CONCLUSION



- Kidney transplant saves lives, improves quality of life, and saves costs.
- Living kidney donation is safe and provides better outcomes.



ASSESSMENT



1. DEFINE KIDNEY TRANSPLANTATION
2. ORGAN DONATION
3. LIST THE TYPES
4. DESCRIBE THE NURSING CARE



REFERENCES



1. <http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/nephrology/renal-transplantation/>
2. <https://www.slideshare.net/Jijoallsaints/kidney-transplantation-13872816>
3. <https://www.slideshare.net/apollobgslibrary/renal-transplant>
4. <https://www.slideshare.net/fareedresidency/kidney-transplantation-seminar-presentation>
5. <http://eknygos.lsmuni.lt/springer/41/91-131.pdf>



Thank You