

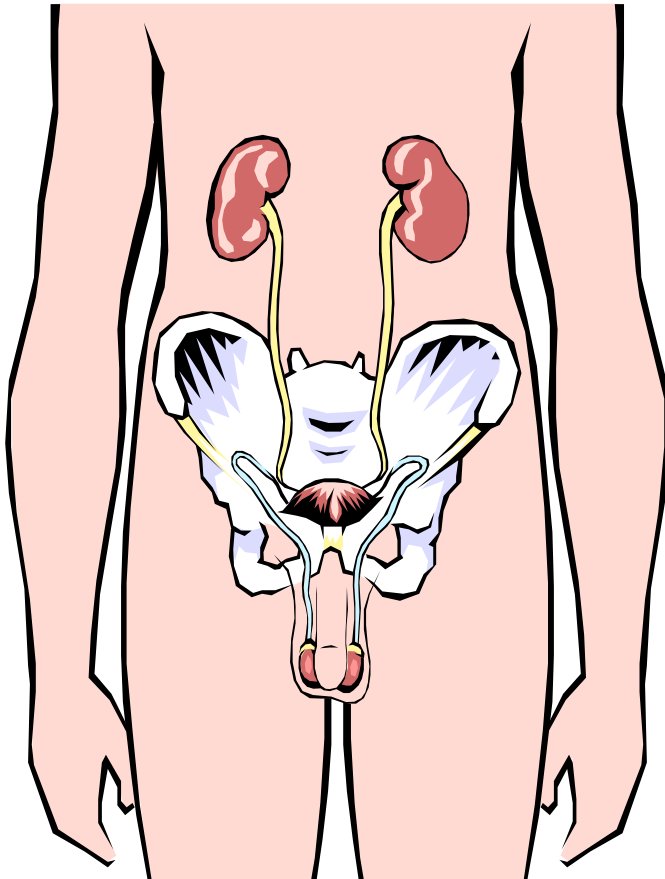
1. Introduction to awareness- why awareness

- *Kidney Disease shows no discrimination on the basis of age, sex, religion and status. The treatment is prolonged and expensive, rendering it unaffordable to most patients in India. A great majority of people including the illiterate and educated do not know much about kidney disease as it is an ailment without symptoms until advanced stage. It is progressive if not detected early.*
- **KIDNEY DISEASE IS PREVENTABLE.**

2. How is awareness done

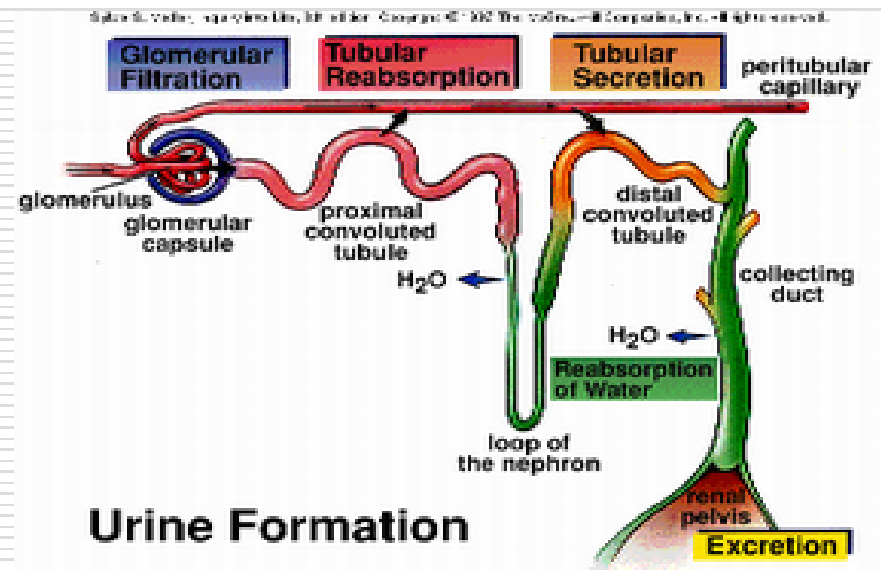
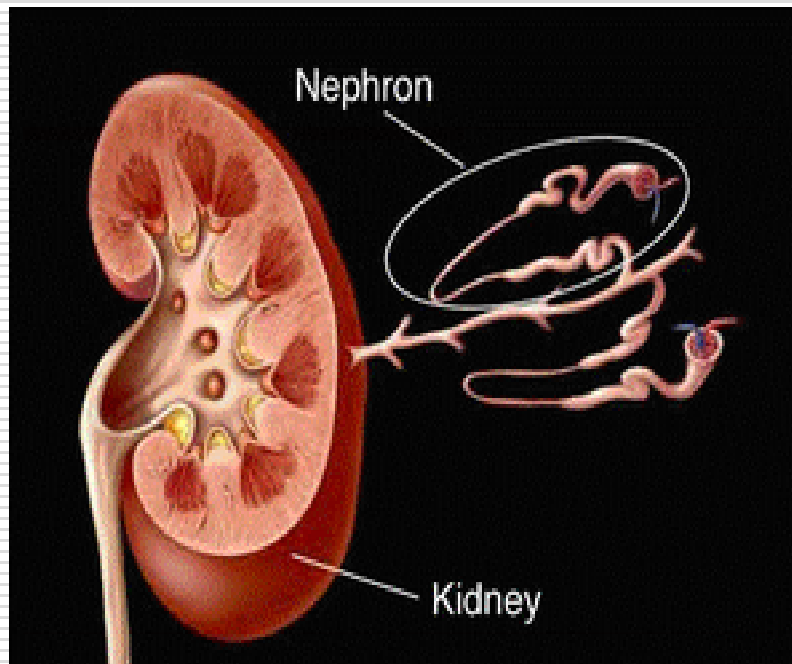
- *We at TANKER FOUNDATION create awareness among the public through educational programmes, supported by power point presentation to explain about kidneys, its functions, causes for failure, symptoms and management of the disease. General guidelines are given to be followed to keep good health. We also exhibit posters at the place of talk, distribute leaflets, in English and Tamil containing information about kidney disease.*

WHAT AND WHERE ARE KIDNEYS – use GA 's slide



- Kidneys are 2 in number
- 1 on each side of the spine
- At the back of the body
- 10 cms long & 5 cms broad
- 150 gms each
- Bean shaped

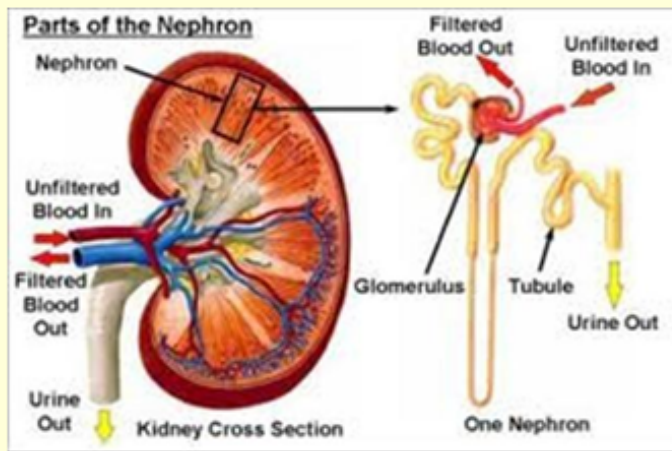
Inside a kidney



Unilateral absent kidney 1 in 1300, bilateral absent kidneys 1 in 4000
In the womb upto 36 weeks is important in development of kidney
Number of nephrons in the kidney: 200000 to 20million

Inside a kidney

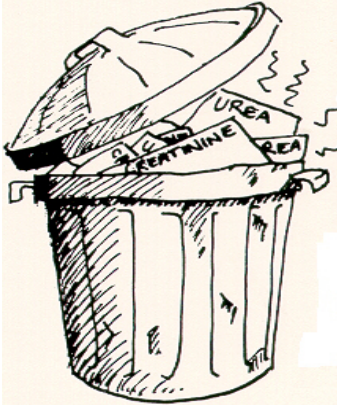
Further Inside “Cross Section of A Kidney”



- Nephron – important functional unit
- A nephron has a glomerulus & a tubule
- 2 - 20 million nephrons in each kidney
- Receive blood through renal artery
- Purify, generate urine
- Return blood through renal vein

20 % of the blood from the heart goes to the kidney for it functioning

Functions of kidneys

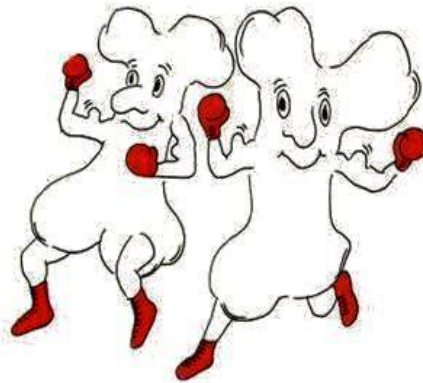


.Filter blood and remove waste products

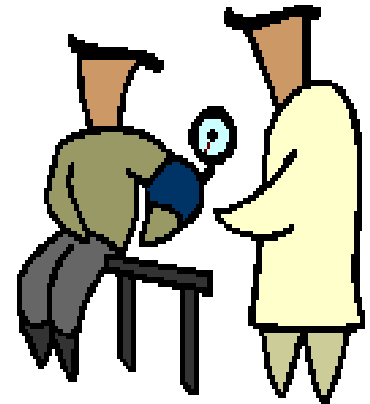
.Control level of water and salt



Regulation of blood
cell production
through a hormone-
erythropoietin



Maintain Bone Health –
through vitamin D



Control of blood pressure
by regulating common salt

CAUSES OF KIDNEY DISEASE



- Uncontrolled diabetes
- Uncontrolled high blood pressure
- Glomerulonephritis
- Congenital /hereditary
- Analgesics / Herbal medications
- Obstruction /chronic infections
- Unknown



To check function

- Step- 1 URINE TEST

Presence of-

- protein
- Blood
- glucose



- Step 3

- ULTRA SOUND



- STEP 2 BLOOD TEST

Creatinine
0.7-1.2mg/dl



- Step 4 BIOPSY

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- Step 5 MANAGEMENT

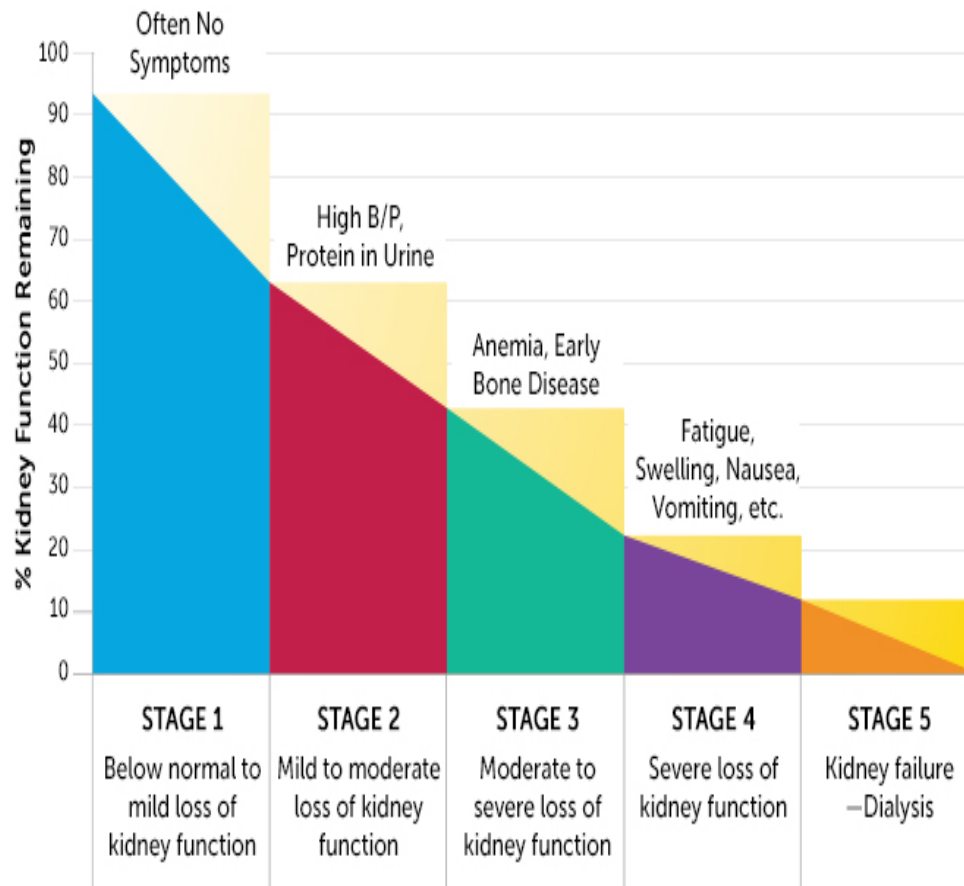
RISK FACTORS FOR KIDNEY DISEASE

- Diabetes, Hypertension
- Age >60 years
- Family history of kidney disease
- History of heart disease
- Smoking
- Obesity
- Use of alternate medicine
- Unsupervised use of painkillers eg- Brufen, Voveran etc.

SYMPTOMS OF KIDNEY DISEASE

- 90% Kidney function can be lost without experiencing any symptoms
- Most symptoms are not specific to Kidney disease
- Symptoms depend on the severity of the kidney failure and rate of loss of kidney function

Stages of ckd & symptoms



Stages of CKD

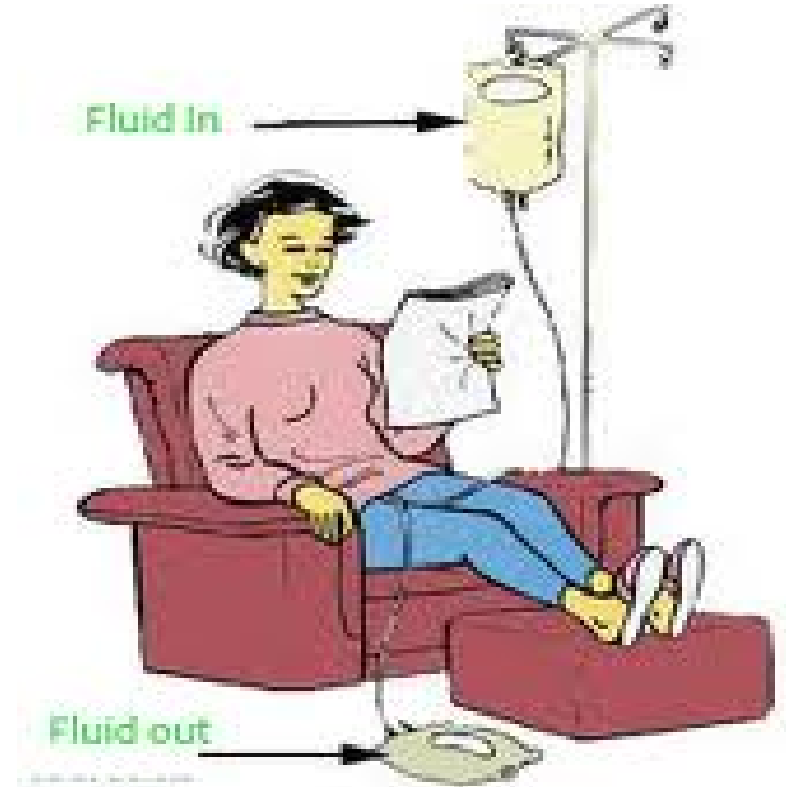
- Malaise
- Weakness
- Fatigue
- Loss of appetite
- Nausea
- Vomiting
- Peptic ulcers

- Heart failure
- Seizure/coma
- Nervous disorder
- Muscle pain and weakness
- Anemia
- Itching
- Jaundice
- Prolonged bleeding after skin injury
- Bone abnormalities

TREATMENT OF KIDNEY DISEASE

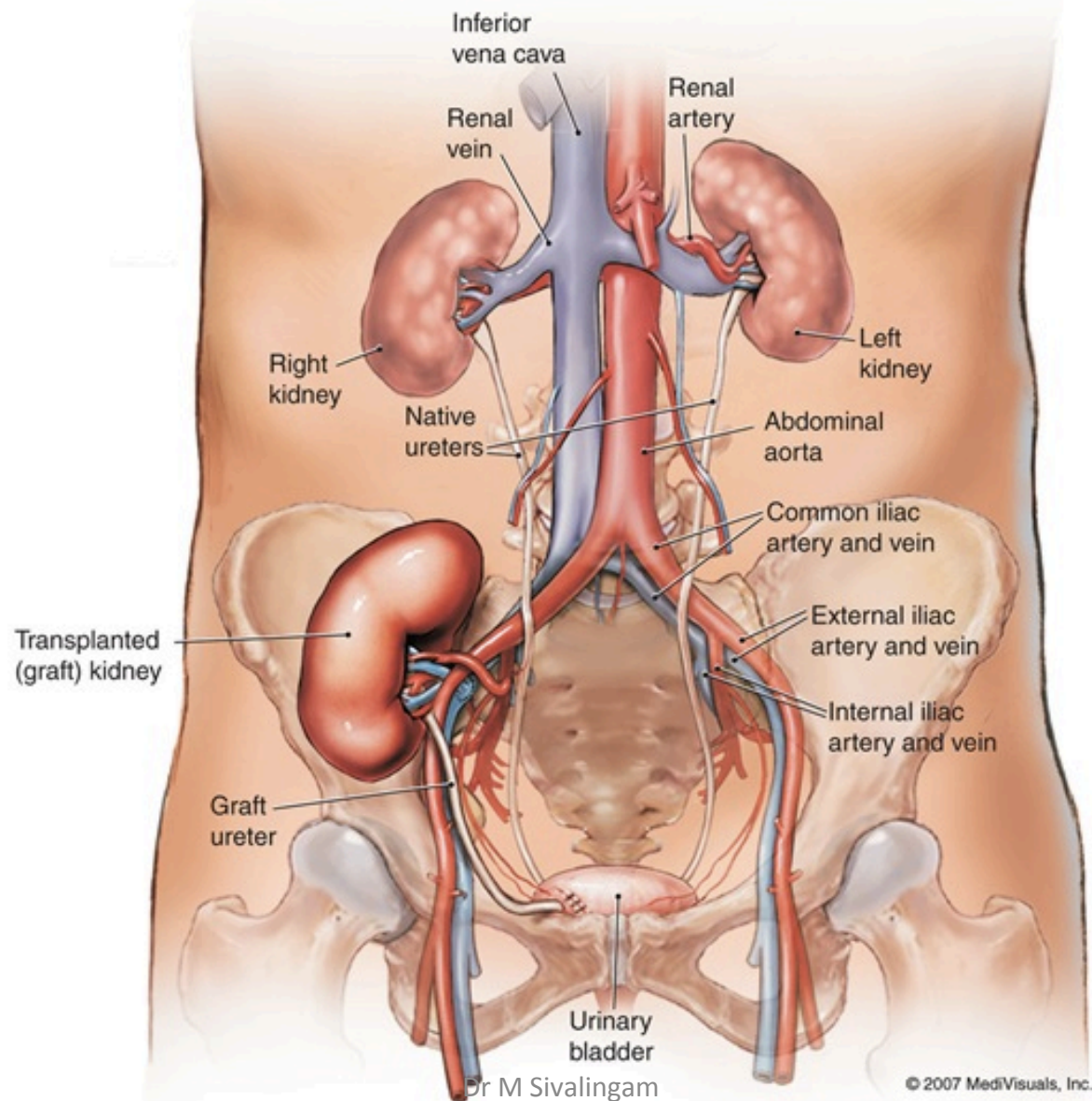


- HEMODIALYSIS



- PERITONEAL DIALYSIS

A Grafted (Transplanted) Kidney



TO PREVENT KIDNEY DISEASE

Annual check of kidney function, blood pressure and urine analysis

Avoid regular and frequent use of pain killers (anti inflammatories)

Good control of sugar and blood pressure

Stop smoking and avoid high salt foods

Try and loose weight if overweight

CONCLUSION

Kidney disease is common

Can be symptom free despite loss of 90% function

Early detection allows treatment which could slow the progression

If you have any of the risk factors, check your kidney function, blood pressure and urine at least once a year