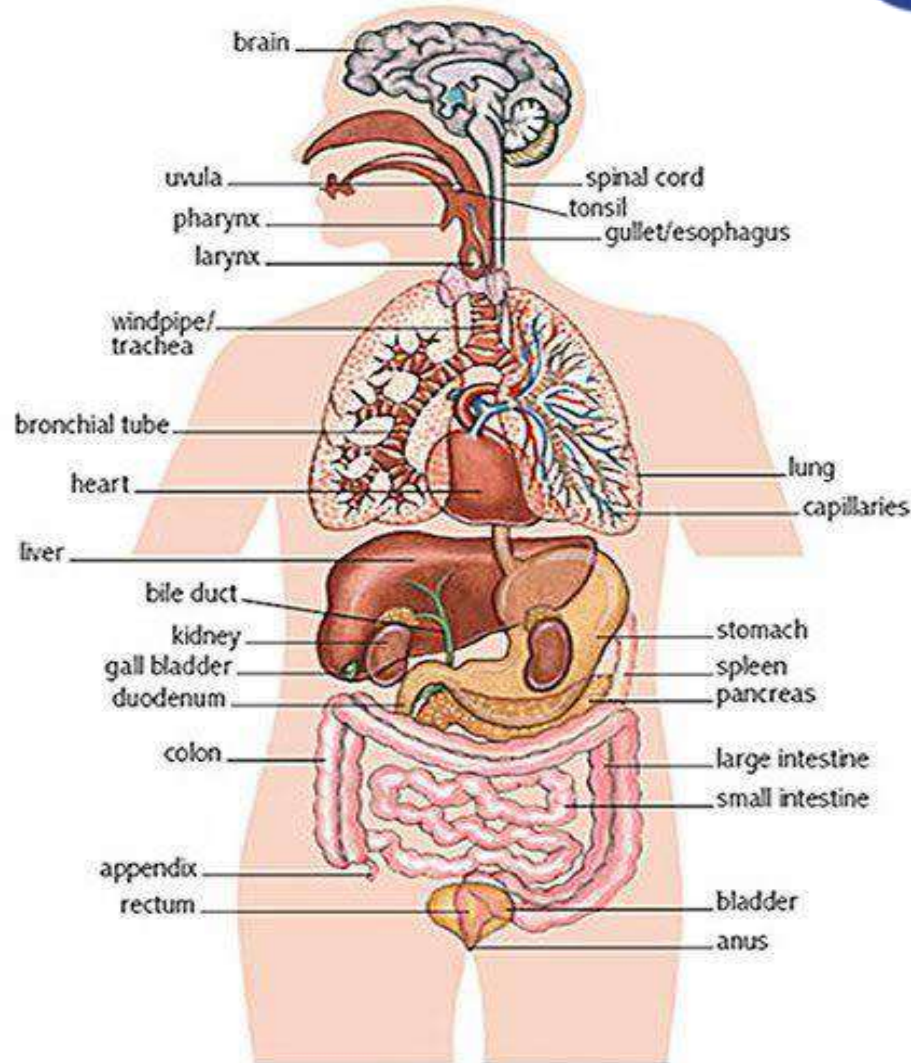




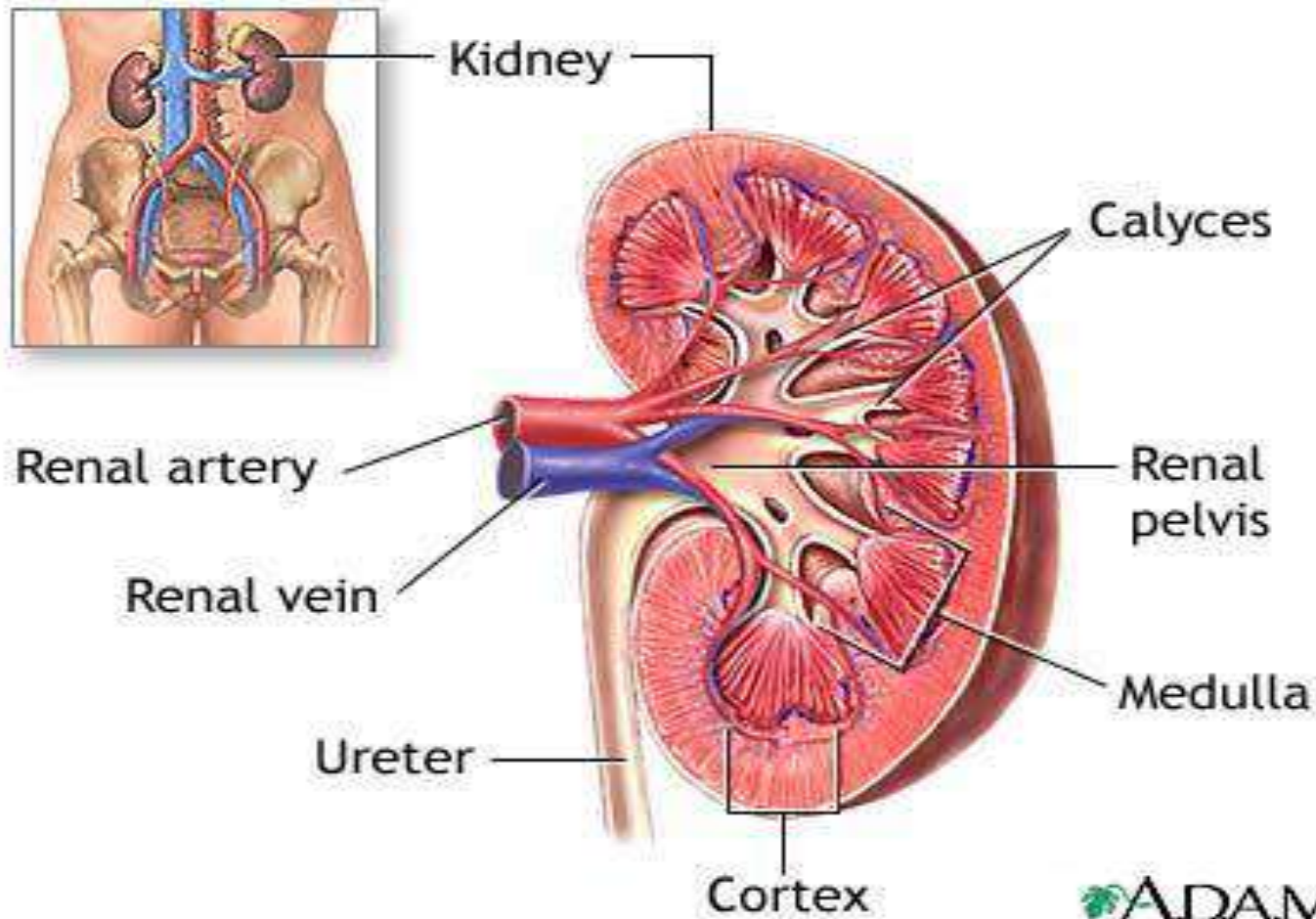
Understanding Chronic Kidney Disease

Rangoonwala Foundation (India) Trust's
Health Awareness Campaign

The Human Body



The Kidney in the Human Body





Understanding what the kidney does for our Body



- We have 2 Kidneys in our Body
- They are fist sized, just like a computer mouse
- They constitute about ½ % of our body weight
- They perform the function of a strainer in our Body
- Inside each kidney there are about 10 to 20 lakh nephrons , which perform the filter function for our body. If we keep these nephrons horizontally, they will be about 16 Kms long



Understanding what the kidney does for our Body



- Adults have about 7-8 liters of blood in their bodies. The kidneys filter them around 400 times a day
- Kidneys clean the blood and send clean blood to different parts of our body and send out the waste through urine
- Kidneys make a hormone that regulates Blood Pressure(BP) by constricting arteries so that due to the increased pressure, blood is sent to different parts of the body



Understanding what the kidney does for our Body



- Kidneys make a hormone that makes RBC (that is why CKD patients need erythropoietin injections)
- Kidneys produce active Vitamin D, if the skin and the liver fail to do so.
- If one kidney fails or is taken away, and the other works upto 75%, it can sustain life.



Understanding Kidney failure

How & Why



- Excess blood loss
- Low Blood volume
- Dehydration
- Poor intake of fluids
- Uncontrolled diabetes and Hypertension
- Long, unsupervised use of certain medicines
- Swellings, breathlessness, confusion, weakness, laziness



Tests



- Blood test
- CBC
- BUN(Blood , Urea, Nitrogen)
- Urine creatinine
- Serum Creatinine



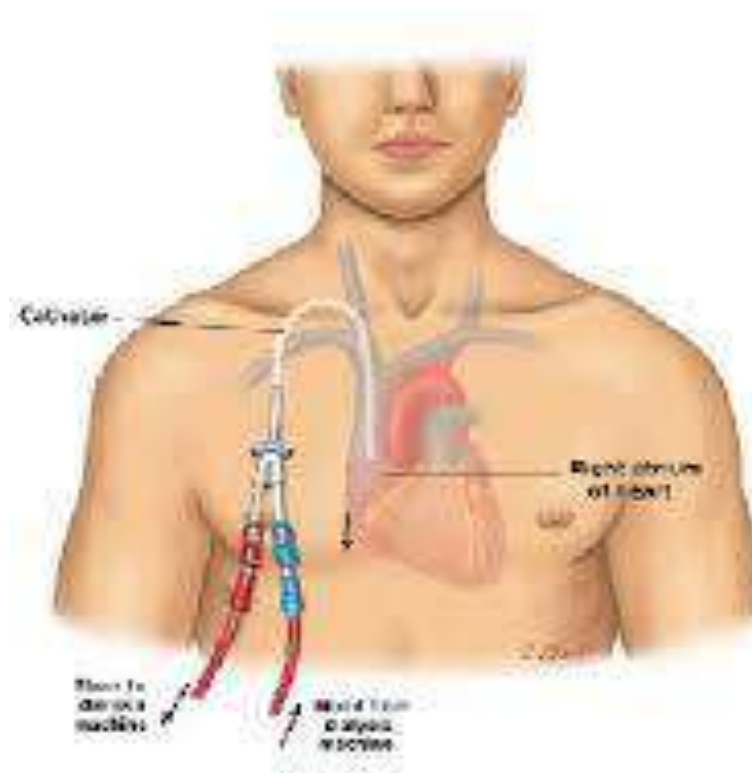
What happens when kidney fails



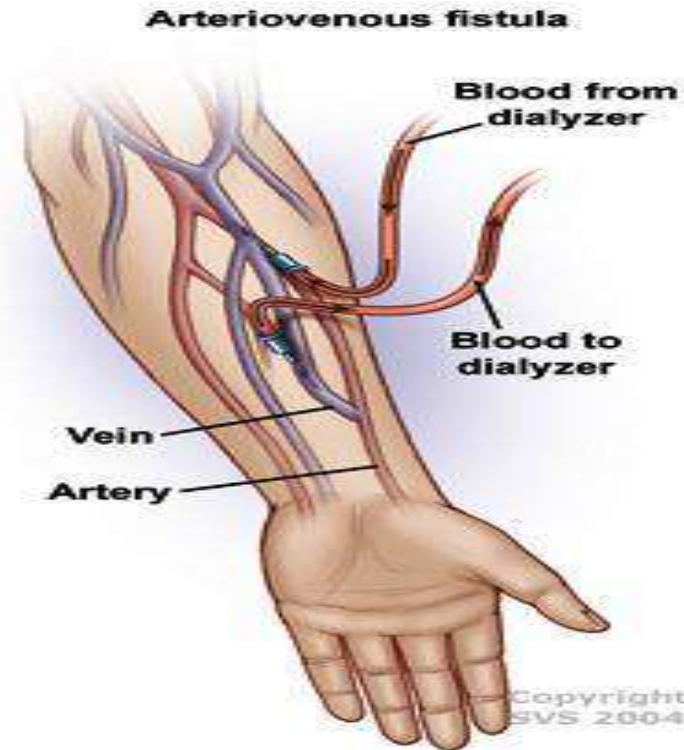
Blood purification stops

- Patient needs Dialysis
or
- Kidney transplant

Catheter - an immediate option



Fistula – required to connect body to dialysis machine . Requires surgery



Dialyzer Tubing connect fistula to dialysis machine



Dialysis machine purifies blood artificially





What does a CKD patient need



- Regular dialysis, 2 to 3 times a week or as specified by the Doctor
- Each dialysis is around 4 hours
- Track creatinine levels
- Take proper complimentary & supplementary medication
- Control fluid intake
- Transplant as an option
- Peritoneal dialysis



Facilities for treatment



- Low cost dialysis centers
- Trusts that help with costs / medicines/ ration/ education of children
- Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY)
- District Hospitals have 4 machines
- Problems of access in rural and remote areas



CKD and Covid 19



- Patients with CKD and other chronic medical conditions as well as Covid 19 positive patients with co-morbidities like diabetes, high blood pressure etc, are at a higher risk of becoming serious
- People with CKD have weaker immune systems, which makes it harder to fight infections like Covid 19



CKD and Covid 19



- Protein or blood in urine is an early sign of effect on kidneys in Covid 19 positive patients. It is important to monitor this
- Some times Covid 19 is said to contribute to Acute Kidney Injury (AKI). Patients who have Covid 19 related AKI may have lower kidney function even after they recover from Covid 19. This should be monitored



CKD and Covid 19



- Covid 19 is a viral infection. Very limited anti-viral medication can be used for CKD patients.
- Hence CKD patients should take utmost care of themselves – be regular in their treatment and medication
- Follow ALL precautions related to Covid 19 properly – maintain physical distancing, wear masks covering mouth and nose , hand wash and hygiene

Take care of Kidneys!

Take prevention of Kidney failure seriously... there is no cure ; the only option is treatment , which is expensive, life long and takes a toll on the patient as well as near & dear ones

Thank You!

