WHAT IS IT?
- Continuous ambulatory peritoneal dialysis (CAPD) is a method of renal replacement therapy.
- A soft (tenckhoff) catheter is surgically implanted into the lower abdomen, the tip reaches down into the peritoneum.
- Using a ‘no-touch’ technique, a bag containing a measured amount of warmed, dextrose-based hypertonic solution (dialysate) is drained into an empty peritoneum via a catheter and then disconnected.
- In four to six hours osmotic pressure draws excess fluid, electrolytes and harmful toxins through the semipermeable membrane. Note: there is always some dialysate in the peritoneal cavity.
- A new ‘set’ is connected. The fluid is drained from the abdomen into the empty bag and fresh dialysate run in. The bags are disconnected.
- Three to five dialysate ‘exchanges’ are carried out daily, the last one remaining in overnight. If someone requires five exchanges they will need automated PD.
- After disconnection, record the bag’s weight to provide a guide to fluid status and enable adjustments to be made to the strength and timing of subsequent exchanges.
- Patients may need weighing at the same time each day after the draining out has been completed.

CONSIDERATIONS
- An intact peritoneum and a reasonable degree of manual dexterity are required.
- CAPD is gentler, reduces hospital visits and aids independence and physical well-being.
- Costs less than haemodialysis.
- Visual impairment does not prohibit CAPD.

NURSING CONSIDERATIONS
- Immunocompromised patients with impaired kidney function are prone to infection, although most use a closed system.
- The exit site and the catheter’s inner lumen can be contaminated.
- Clean hands thoroughly.
- Cloudy dialysate, abdominal pain and pyrexia may indicate peritonitis.
- Local policies determine treatment but dialysate samples help isolate the organism.
- Treat dialysate as other bodily fluids.
- Refer to local policy for exit site care. Pulling or movement of the catheter causes excoriation and precipitates infection. The distal end should be secured.
- Reliance on strong dialysate causes sclerosing of the peritoneum, membrane thickening, adhesions, possible small bowel obstruction and loss of permeability.
- Constipation hinders drainage and potassium excretion. Record fluid balance, bowel and dietary habit.
- Fibrin clots (like strands of egg white) may block the catheter necessitating heparinisation of dialysate.
- The catheter tip may lodge in the omentum. Encourage repositioning during the exchange to aid drainage. The catheter may need replacing.
- Cold dialysate causes discomfort and should be warmed in a designated fluid-warming cupboard.
- Altered body image can cause complex psychological issues. Counselling and involvement of the multidisciplinary team should be part of the standard treatment package.
- Chronic renal failure can affect physical and mental well-being. It is important to allow patients time to express their feelings. Referral for community follow-up.

REFERENCES

WEBSITES
UK National Kidney Federation: www.kidney.org.uk
The Renal Association: www.renal.org

The information given serves as a general reference. Nurses should consult their individual trust policies on clinical procedures.