

## **MODULE**

### **TITLE OF SKILL: PERITONEAL DIALYSIS SKILL**

#### **INTRODUCTION/RATIONALE:**

Peritoneal dialysis is a technique meant to replace filtering function of kidneys. Kidneys remove nitrogenous waste that is produced during metabolism by our body. Patient needs peritoneal dialysis when their estimated glomerular filtration becomes  $\leq 15$  ml/min/BSA. At this level of their kidney function they could not filter blood efficiently and they need peritoneal dialysis to sustain their life.

#### **LEARNING OBJECTIVES:**

After the session students should be able to:

- Define peritoneal dialysis
- Types of peritoneal dialysis
- Indications of peritoneal dialysis
- Complications of peritoneal dialysis

#### **EQUIPEMENT REQUIRED**

- Tenckhoff catheter
- Transfer/ giving set
- Peritoneal dialysis solutions

#### **PROCEDURE:**

**Use strict aseptic technique, including wearing a surgical mask and surgical gloves. Obtain the prescribed concentration and amount of dialysate. After attaching the primed dialysate connecting tubing to the PD catheter, open the infusion pump allow the dialysate to enter the patient's peritoneal cavity by gravity for the prescribed time- usually 5 to 10 minutes. Close the clamp once the dialysate solution has infused. Let the dialysate dwell in his abdomen for the prescribed time. When the dwell time is complete open the drain clamp and let the fluid drain by gravity into the drainage bag.**

- **Monitor patient's vital signs**
- **When drainage is complete, attach a new bag of dialysate and repeat as ordered**
- **Monitor and document patient's fluid intake and output, and record positive and negative balances after each PD exchange**
- **Monitor serum electrolytes, glucose, and lipid levels**

#### **BACKGROUND INFORMATION ( THEORITICAL INFORMATION TO BE READ BY THE STUDENT)**

Peritoneal dialysis is a way to remove waste products from blood when kidneys can't adequately do the job any longer. During PD, a cleansing fluid flows through a tube ( catheter ) into part of abdomen. The lining of abdomen (peritoneum ) acts as a filter and removes waste products from blood. After a set period of time, the fluid with the filtered waste products flows out of your abdomen and discarded.

TYPES:

- CAPD ( continuous ambulatory peritoneal dialysis)
- APD (automated peritoneal dialysis)

INDICATIONS:

- Uremic pericarditis
- Uremic encephalopathy
- Severe metabolic acidosis
- Refractory hyperkalemia
- Refractory pulmonary edema

COMPLICATIONS:

- Infections
- Weight gain
- Hernia
- Inadequate dialysis

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