

6

Peritoneal Dialysis

Patient name: _____ Admission: _____

NRS
DATE INITIAL

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- I. **The client/caregiver can define peritoneal dialysis.**
 - A. It is a process that mimics the function of the kidney.
 - B. A dialysis solution is put into the membrane of the abdomen to remove wastes and other impurities and excess fluid from the body.

- II. **The client/caregiver can list various types of peritoneal dialysis.**
 - A. Intermittent peritoneal dialysis
 1. The process is performed by a machine, usually in the hospital at night while sleeping.
 2. It is done three to five times a week in 8- to 10-hour sessions.
 3. The abdomen is empty between dialyses.
 - B. Continuous ambulatory peritoneal dialysis
 1. A bag of dialysate solution is instilled into the abdomen, which takes about 10 minutes.
 2. This solution is left in place for 4 to 8 hours and then drained.
 3. This procedure is repeated four to five times daily.
 - C. Continuous cycling peritoneal dialysis
 1. This procedure is done at night by connecting a tubing from a machine to the abdomen.
 2. The machine performs approximately three to seven exchanges during the night.
 3. The peritoneal fluid is left in the abdomen during the day.

- III. **The client/caregiver can describe the basic procedure.**
 - A. Peritoneal dialysis is done by inserting a catheter through the abdominal wall.
 - B. The dialysis solution is allowed to flow into the abdomen between the abdominal

NRS
DATE INITIAL

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- wall and the visceral wall, which covers the abdominal organs.
- C. The solution is allowed to stay in the abdomen for a set amount of time.
 - D. The peritoneum acts as a membrane, allowing diffusion and osmosis to occur to remove toxic wastes and excess fluid from the body.
 1. Diffusion is the movement of a solution of higher concentration to a solution of lower concentration.
 2. Osmosis is the passage of fluid through a membrane from a solution of lower concentration to a solution of higher concentration.
 - E. The fluid is then drained from the abdomen.
- IV. **The client/caregiver can list precautions to follow when doing the procedure.**
 - A. Wash your hands every time you need to handle your catheter.
 - B. Store supplies in a cool, clean, dry place.
 - C. Warm the fluid before beginning procedure.
 - D. Maintain sterile technique when opening and closing catheter connections.
 - E. Notify physician if pain occurs.
 - F. Inspect each bag of solution for signs of contamination before use.

 - V. **The client/caregiver can list measures to follow between dialysis treatments.**
 - A. Follow the diet as instructed by physician, usually low in protein, sodium, and potassium.
 - B. Restrict fluids as instructed.
 - C. Obtain adequate rest and exercise.
 - D. Take temperature for early detection of infection.
 - E. Weigh daily at the same time each day.
 - F. Wear a Medic Alert bracelet.

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NRS
DATE INITIAL

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- G. Keep follow-up appointment with physician.
- H. Avoid using over-the-counter medication without approval from physician.
- I. Report any increased abdominal girth, distention, pain, absence of bowel movements, and fever.

VI. The client/caregiver can list measures for care of exit site of the dialysis catheter.

- A. Assess for signs and symptoms of infection.
- B. Apply antiseptic and dry sterile dressing as instructed.
- C. Keep sterile cap in place.
- D. Report any signs of infection at site (i.e., redness, swelling, tenderness, and drainage).

VII. The client/caregiver is aware of possible complications of peritoneal dialysis.

- A. Infection, the most common problem (peritonitis)
- B. Dehydration
- C. Hernias
- D. Constipation
- E. Respiratory difficulty
- F. Catheter-related complications
- G. Dialysis complications

VIII. The client/caregiver can list specific symptoms of infection, which need to be reported promptly.

- A. Signs and symptoms of infection to report are
 - Fever
 - Nausea or vomiting

NRS
DATE INITIAL

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- Redness or pain around the catheter
- Unusual color or cloudiness in used dialysis solution
- A catheter cuff that has been pushed out

RESOURCES

American Association of Kidney Patients
www.aakp.org

American Kidney Fund
www.kidneyfund.org

National Kidney Foundation
www.kidney.org

Dietitian

Support groups

Counseling

REFERENCES

Ackley, B. J., & Ladwig, G. B. (2006). *Nursing diagnosis handbook: A guide to planning care*. St. Louis: Mosby Inc.

Canobbio, M. M. (2006). *Mosby's handbook of patient teaching*. St. Louis: Mosby Inc.

Perry, A., & Potter, P. (2006). *Clinical nursing skills & technique*. St. Louis: Mosby Inc.

Timby, B. K., & Smith, N. C. (2003). *Introductory medical-surgical nursing* (8th ed.). Philadelphia: J. B. Lippincott Williams & Wilkins.