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Acute Renal Failure

Patient name: _____ Admission: _____

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I. The client/caregiver has a basic understanding of the anatomy and physiology of the renal system.

- A. The kidneys are two bean-shaped organs and are located on each side of the vertebral column at the 12th thoracic vertebrae at the posterior abdominal wall.
- B. Each kidney has a ureter about 25 to 30 centimeters long that connects to the bladder.
- C. The function of the kidneys is to remove waste materials from blood, balance body fluids, and form urine.

II. The client/caregiver can define acute renal failure.

- A. Acute renal failure is the sudden inability of kidneys to remove metabolic waste and concentrate urine without losing electrolytes.
- B. Renal cells are damaged by decreased renal blood flow and a lack of oxygen and other nutrients to the cells.

III. The client/caregiver can list factors that may increase risk of renal failure.

- A. Low blood pressure caused by trauma, surgery, serious illness, septic shock, hemorrhagic shock, burns, or dehydration
- B. Acute pyelonephritis or septicemia
- C. Urinary tract obstruction
- D. Blood transfusion reaction
- E. Autoimmune kidney disease

IV. The client/caregiver can recognize signs and symptoms.

- A. Nausea and vomiting
- B. Urinary system changes
 - A decrease in the amount of urine
 - No urination
 - Excessive urination at night
- C. Changes in mental status or mood
 - Drowsiness or lethargy
 - Agitation

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- Delirium or confusion
- Coma
- Mood changes
- Trouble paying attention
- Hallucinations
- D. Generalized swelling and fluid retention
- E. Flank pain between ribs and hips
- F. Headache
- G. Decreased sensation in hands and feet
- H. Decreased appetite and metallic taste in mouth
- I. Slow, sluggish movements, hand tremor, or seizures
- J. Itchiness
- K. Bruising and prolonged bleeding (nosebleeds, blood in stool)

V. The client/caregiver can list measures to manage acute renal failure.

- A. Follow prescribed diet closely.
 - High in carbohydrates
 - Low in protein
 - Low in sodium
 - Low in potassium
- B. Monitor fluid status closely.
 - Weigh daily using the same scale at the same time each day.
 - Measure intake and output.
 - Restrict fluids as instructed.
- C. Take medication as ordered (possible use of antibiotics and/or diuretic).
- D. Avoid infections, or get prompt treatment of infection.
- E. Follow activity as ordered with regular rest periods.
- F. Provide skin care and oral hygiene:
 1. Keep fingernails short and avoid scratching.
 2. Use lotions to moisturize skin and decrease itchiness.
 3. Use a soft-bristled toothbrush and mouthwash.

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- G. Keep follow-up appointments with physician and laboratory tests.
- H. Use Medic Alert card and bracelet.

VI. The client/caregiver can list possible complications.

- A. Fluid and electrolyte imbalance
- B. Chronic renal disease
- C. Anemia (loss of blood in the intestines)
- D. End-stage renal disease
- E. Damage to heart or nervous system
- F. Hypertension
- G. Need for dialysis

RESOURCES

National Kidney Foundation
www.kidney.org

National Kidney and Urologic Diseases Information Clearinghouse
<http://kidney.niddk.nih.gov/about/index.htm>

Support groups

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