**SYNDROME OF INAPPROPRIATE ANTIDIURETIC HORMONE (SIADH)**

This content was prepared by Barbara Lubejko, MS, RN, oncology clinical specialist at the Oncology Nursing Society. Check your facility’s policies, procedures, and/or standards of practice before applying this information to practice. For more information, email pubCJON@ons.org.

**RISK FACTORS**
- Malignancies—particularly lung, head and neck, and central nervous system (CNS) cancers
- Pulmonary and CNS disorders
- Medications, such as chemotherapy, targeted therapies, antidepressants, and analgesics

**CAUTION**
The underlying cause needs to be treated to prevent recurrence.

**CAUSES/PATHOPHYSIOLOGY**
- Unregulated production of antidiuretic hormone (ADH)
- Kidneys conserving excess water
- Leads to serum hyponatremia and water intoxication

**BEST PRACTICE**
Close monitoring of neurologic status is essential to patient safety.

**DIAGNOSTIC CRITERIA**
- Plasma sodium: less than 135 mEq/L
- Plasma osmolality: less than 275 mOsm/kg
- Urine osmolality: greater than 300 mOsm/L
- Urine sodium: greater than 30 mmol/L
- Adrenal and thyroid function normal

**BEST PRACTICE**
Plasma sodium should be slowly replaced over 24–48 hours to prevent complications.

**EMERGENCY INTERVENTIONS**
- Depends on the rate of onset and severity of hyponatremia
- Mild to moderate: sodium 120–134 mEq/L
  - Fluid restriction: 500–1,000 cc/day
  - Demeclocycline: 600–1,200 mg/day
  - Seizure precautions
- Severe: sodium less than 120 mEq/L
  - Hypertonic saline (3%)
  - Furosemide
  - May use vasopressin-2 receptor antagonists (conivaptan)
  - Frequent neurologic examinations and seizure precautions

**ADDITIONAL RESOURCES**
