Syndrome of inappropriate antidiuretic hormone secretion (SIADH)

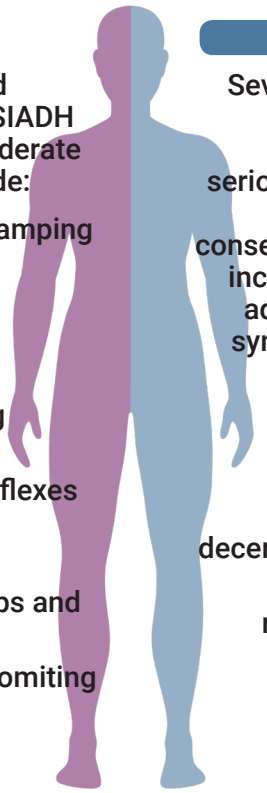
Syndrome of inappropriate secretion of antidiuretic hormone (SIADH) is characterised by increased water retention and sodium loss.[1]

Signs and symptoms of SIADH

Early signs

Early signs and symptoms of SIADH are mild to moderate and may include:

- abdominal cramping
- anorexia
- ataxia
- diarrhoea
- difficulty concentrating
- headache
- hypoactive reflexes
- irritability
- lethargy
- muscle cramps and weakness
- nausea and vomiting
- oliguria
- thirst



Severe signs

Severe hyponatremia (serum sodium < 120mmol/L) has serious and potentially life -threatening consequences and may include more severe/ advanced signs and symptoms including:

- confusion
- hallucinations
- delirium
- seizures
- decerebrate posturing
- coma
- respiratory arrest

Assessment and immediate interventions

Severe hyponatremia and acute SIADH have potentially life-threatening consequences.

Assess airways, breathing and circulation.
Take a thorough clinical history.

- Assess history of malignancy.
- Record previous and current treatments and medications.
- Assess the severity, duration and speed of onset of symptoms. These are important in determining the urgency of intervention.

Immediate nursing interventions

In patients with severe or symptomatic acute hyponatremia, the following interventions should be initiated whilst awaiting medical review and diagnosis.[4]

- **Manage airway**
- **Establish IV access**
- **Manage symptoms**
- **Perform frequent and ongoing assessment of the respiratory, cardiac, neurologic gastrointestinal, and renal systems**
- **Monitor fluid and electrolyte levels**

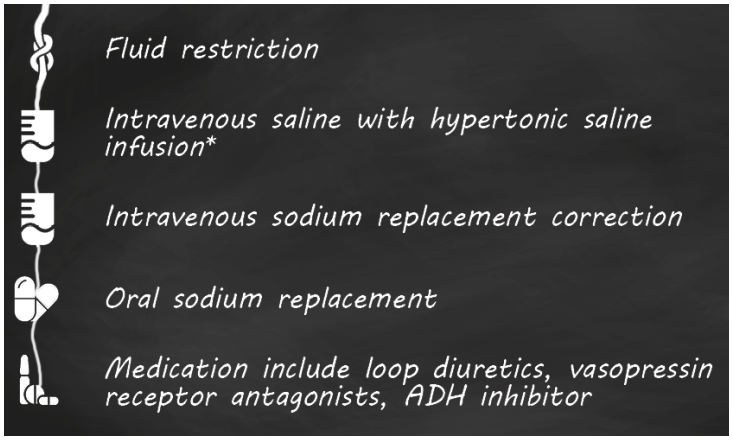
Diagnosis of SIADH

Attention to history is critical to rule out differential diagnoses and identify the underlying cause of SIADH. Other conditions can cause hyponatremia without the associated water excess of SIADH. Review of current medications is necessary to determine if SIADH may be medication induced. In addition to a complete medical history and physical examination, laboratory investigations may include:[4]

- full blood count
- electrolytes, urea, creatinine
- serum osmolality, urine osmolality and urine sodium (performed at the same time to allow for best comparison)

Management of hyponatremia

Severe and acute symptomatic hyponatremia has potentially life- threatening consequences. Urgent correction of serum sodium to prevent brain herniation and neurological damage from cerebral ischemia is indicated.[4,8]



Correction of the underlying cause

The only definitive treatment is elimination of the underlying cause of inappropriate ADH e.g. antineoplastic drug, brain metastases or other pharmacologic agents.[1]

The management of patients with SIADH is multidisciplinary. The aim is to control the primary condition causing SIADH as well as monitor fluid status and electrolytes following initial intervention to correct hyponatremia.

Cancer Institute NSW | cancer.nsw.gov.au
t +61 (0)2 8374 5600 f +61 (0)2 8374 3600 e cinsw-information@health.nsw.gov.au