## Topic 8 DQ 1

Choose a medical condition from the endocrine system and explain the pathophysiological changes that may occur. What patient education would need to be included relating to this disorder? Make sure that you select a different medical condition than your peers. Include the name of the medical condition (bolded) above your answer so that the medical condition can easily be identified. Cite your references in APA style.

# Syndrome of inappropriate antidiuretic hormone ADH release (SIADH)

"Syndrome of inappropriate antidiuretic hormone ADH release (SIADH) is a condition defined by the unsuppressed release of antidiuretic hormone (ADH) from the pituitary gland or nonpituitary sources or its continued action on vasopressin receptors" (Yasir & Mechanic, 2023).

# **Pathophysiology**

"ADH, also known as arginine vasopressin, is formed in the hypothalamus and stored in the posterior pituitary via a pituitary stalk" (Yasir & Mechanic, 2023). The purpose of the ADH is for osmoregulation. When there are excessive amounts of ADH this can be caused by "several types of tumors, the most common of which are primary lung malignancies. Nonmalignant lung disorders are also capable of ADH synthesis, or stimulation of central ADH production, especially pulmonary tuberculosis" (Banasik, 2022). Hyponatremia is a result of SIADH, which causes excessive water to be conserved and then dilutes the sodium found in the serum, which falls below the normal. This then causes the cells to swell, and their swelling affects the neurons. Neurons. Certain disorders such as hypothyroidism and adrenal insufficiency can cause an increase in ADH production and secretion. SIADH causes symptoms of weakness, muscle cramps, nausea, vomiting, postural blood pressure, poor skin turgor, fatigue, anorexia, and lethargy. Confusion, hemiparesis, seizures, and come can occur with SIADH is serve (Banasik, 2022).

#### **Patient Education**

Fluid restrictions will be a mainstay for patients who have SIADH. Patients with severe cases of SIADH would need a hypotonic solution via intravenous routes to regulate sodium levels in these patients (Banasik, 2022). Monitoring of fluids and electrolytes is essential in treating SIADH effectively (Banasik, 2022).

### References

Banasik, J. (2022). Pathophysiology E-book (7th ed.). Elsevier Health Sciences.