Coordinating Care for Patients With Pituitary Disorders

Chapter Review Questions

1. The nurse recognizes that which hormones are produced by the posterior pituitary gland? (Select all that apply.)
   A. ACTH
   B. Vasopressin
   C. Thyroid stimulating hormone
   D. Oxytocin
   E. Growth hormone

2. The patient just diagnosed with acromegaly is scheduled for a transsphenoidal hypophysectomy. Which statement made by the patient indicates a need for clarification regarding this treatment?
   A. “I will get to drink fluids once I am awake after surgery.”
   B. “I’m glad there will be no visible incision from this surgery.”
   C. “I hope I can go back to wearing size 8 shoes instead of size 12.”
   D. “I will wear slip-on shoes after surgery so I don’t have to bend over.”

3. The nurse incorporates the nursing diagnosis “Fluid volume deficit related to excessive secretion of vasopressin” in the plan of care for the patient with which disorder?
   A. Acromegaly
   B. Diabetes insipidus
   C. Hypopituitarism
   D. SIADH

4. In evaluating the therapeutic effects of vasopressin, the nurse monitors for which finding?
   A. Urine specific gravity of 1.050
   B. Urine output of 30 to 50 mL/hr
   C. Serum sodium of 148 mEq/L
   D. Serum osmolality of 310 mOsm/kg

5. In reviewing admission orders for a patient admitted with SIADH, the nurse should question which order?
   A. IV 3% NS at 10 mL/hr
   B. Seizure precautions
   C. Sodium-restricted diet
   D. Fluid restriction of 1000 mL/day
Answers and Rationales

1. The nurse recognizes that which hormones are produced by the posterior pituitary gland? (Select all that apply.)
   A. ACTH
   B. Vasopressin
   C. Thyroid stimulating hormone
   D. Oxytocin
   E. Growth hormone

   **Answer:** B and D

   **Rationale:** Vasopressin (antidiuretic hormone) and oxytocin are secreted by the posterior pituitary gland. ACTH, TSH, and growth hormone are released from the anterior pituitary gland.

2. The patient just diagnosed with acromegaly is scheduled for a transsphenoidal hypophysectomy. Which statement made by the patient indicates a need for clarification regarding this treatment?
   A. “I will get to drink fluids once I am awake after surgery.”
   B. “I’m glad there will be no visible incision from this surgery.”
   C. “I hope I can go back to wearing size 8 shoes instead of size 12.”
   D. “I will wear slip-on shoes after surgery so I don’t have to bend over.”

   **Answer:** C

   **Rationale:** Changes to bone thickness are permanent, and the hands and feet sizes will not decrease after treatment of the hypersecreting tumor. Patients are allowed oral intake once awake, alert with an intact gag and swallow. There will not be a visible scar as the surgical approach is transsphenoidal. The patient is discouraged from bending at the waist as this can increase intracranial pressure and place pressure on the graft site at the surgical site.

3. The nurse incorporates the nursing diagnosis “Fluid volume deficit related to excessive secretion of vasopressin” in the plan of care for the patient with which disorder?
   A. Acromegaly
   B. Diabetes insipidus
   C. Hypopituitarism
   D. SIADH

   **Answer:** B

   **Rationale:** Diabetes insipidus (DI) leads to fluid volume deficit secondary to losses of large amounts of water through the kidneys. Acromegaly is associated with overgrowth of bones secondary to excessive growth hormone secretion. Hypopituitarism is associated with multiple disorders based upon target deficiencies. SIADH is an excess of ADH leading to water retention and fluid volume overload.

4. In evaluating the therapeutic effects of vasopressin, the nurse monitors for which finding?
   A. Urine specific gravity of 1.050
   B. Urine output of 30 to 50 mL/hr
   C. Serum sodium of 148 mEq/L
   D. Serum osmolality of 310 mOsm/kg

   **Answer:** B

   **Rationale:** Vasopressin is used to treat Diabetes Insipidus (DI) and works like antidiuretic hormone to increase water reabsorption in the kidneys. The therapeutic effect of this medication leads to decreased urine output. Both the serum sodium and osmolality are increased with DI.

5. In reviewing admission orders for a patient admitted with SIADH, the nurse should question which order?
   A. IV 3% NS at 10 mL/hr
   B. Seizure precautions
   C. Sodium-restricted diet
   D. Fluid restriction of 1000 mL/day

   **Answer:** C

   **Rationale:** The patient with SIADH has dilutional hyponatremia secondary to increased water reabsorption in the kidneys secondary to excessive ADH. Elevating the serum sodium is important to decrease the risk of seizures and other complications, so there is no need to restrict sodium in the diet. The patient is usually placed on a fluid restriction. A 3% normal saline is a very hypertonic solution that should be administered via a central line and delivered by an infusion pump.