Endocrine System Case Studies

1. Kelly is exhibiting neuromuscular irritability, tetany (tingling noted around the mouth and in her feet), dry skin and fingernails, more prone to cavities (you suspect weak tooth enamel). Her blood work is normal, except that hypocalcemia is noted. She is treated with supplemental calcium and Vitamin D.
The disorder is: ________________________________________________________________
The hormone of hyposecretion is: ________________________________________________

2. Luke, age 47, is complaining of his shoes and rings not fitting anymore. He says he has developed large gaps between his teeth. He mentions that he has difficulty chewing and has gained 20 pounds in the last 6 months. He is a diaphoretic (sweating), and he has oily skin. A CT scan reveals a tumor in the pituitary gland, which will be surgically removed.
The disorder is: ________________________________________________________________
The hormone of hypersecretion is: ________________________________________________

3. Autumn, age 30, has had noticeable weight gain resulting in purple striae (stretch marks) along the abdomen. She has increased deposits of adipose tissue in the face (moon face), the shoulders (buffalo hump), neck and trunk. She states that when she cuts herself, it takes “forever” to heal. She complains of an irregular heartbeat as well. A physical examination indicates hypertension (high blood pressure). Her blood work reveals hypernatremia, hypokalemia, and hyperglycemia. A urine test reveals glucosuria. Surgery is recommended to remove the involved glands.
The disorder is: ________________________________________________________________
The hormone of hyposecretion is: ________________________________________________

4. Timothy, 6 months old, is brought into the doctor. The parents, who were thrilled with their “good baby,” are now concerned that something is wrong. The child’s tongue protrudes from the mouth and jaundice is present. Because of the tongue, respirations seem noisy and difficult. The forehead is short and puffy. The child is generally inactive and sleeps excessively. The child has a dull expression. The skin is cold to touch and mottled in appearance. Blood work reveals that the child should have supplemental thyroid medication.
The disorder is: ________________________________________________________________
The hormone of hyposecretion is: ________________________________________________

5. Duane, age 28, is hospitalized for this eighth kidney stone this year. He is also complaining of having to urinate large amounts frequently, bone tenderness and muscle weakness. His blood work is unremarkable, except for hypercalcemia. It is recommended that he have surgery to remove his parathyroid glands.
The disorder is: ________________________________________________________________
The hormone of hypersecretion is: ________________________________________________
6. Rebecca, age 33, states she has lost a lot of weight in the past 6 months. She claims this is surprising due to her voracious appetite. She complains of her heart racing in her chest, difficulty concentrating, and nervousness. She claims that she can no longer tolerate heat, even though she grew up in New Zealand. Her eyes are protruding, a condition called exophthalmos. Examination reveals an enlarged thyroid gland. Treatment would include anti-thyroid drugs and possibly surgery to remove part of the thyroid gland.

The disorder is: __________________________________________________________

The hormone of hypersecretion is: __________________________________________

7. Brittany, age 8, complains of arm and leg pains. She is 12 inches taller than most children her age. Treatment involves the discovery of the underlying cause, such as a tumor in the pituitary gland.

The disorder is: ____________________________________________________________

The hormone of hypersecretion is: __________________________________________

8. Jerome, age 17, is complaining of frequent urination, fatigue, dry mouth, dizziness, polydipsia (extreme thirst), and a craving for cold water. He is hospitalized to record his intake and output to obtain lab values. In a 24-hour period, he voided 7 liters of dilute urine and drank 8.5 liters of fluid. His blood pressure was an average of 72/36. Treatment involves discovering the cause, possibly a tumor in the pituitary gland.

The disorder is: ____________________________________________________________

The hormone of hyposecretion is: ____________________________________________