# ANS and hormons

**If a man has an attack of bronchiospasm it is necessary to reduce the effect of vagus on smooth muscles of bronchi. What membrane cytoreceptors should be blocked for this purpose?**
**A. *M-cholinoreceptors**
B.N-cholinoreceptors
C.α-adrenoreceptors
D.β-adrenoreceptors
E.α- and β-adrenoreceptors

**A man has an accelerated heart rate, mydriatic pupils, dry mouth. It is caused by activation of the following system function:**
A. Vagoinsular
B. Metasympathetic
**C. *Sympathetic**
D. Hypothalamo-pitutary- adrenal

**1. Examination of a patient revealed overgrowth of facial bones and soft tissues, tongue enlargement, interdental spaces in the enlarged dental arch. What changes of the hormonal secretion are the likely?**
A. Hyposecretion of insulin
B. Hyposecretion of thyroxine
C. Hyposecretion of the somatotropic hormone
D. Hypersecretion of insulin
**E. *Hypersecretion of the somatotropic hormone**

**2. A 32-year patient consulted a doctor about the absence of lactation after parturition. Such diso must be explained by the deficit of the following hormone:**
A. Vasopressin
B. Glucagon
C. Thyrocalcitonin
**D. *Prolactin**
E. Somatotropin

**3. In the course of an experiment adenohypophysis of an animal has been removed.**
**The resulting atrophy of thyroid gland and adrenal cortex has been caused by deficiency of the following hormone:**
A. Thyroid hormone
B. Somatotropin
**C. *Tropic hormones**
D. Cortisol
E. Thyroxin

**4. A patient complains of hydruria (7 liters per day) and polydipsia. Examination reveals no disorde carbohydrate metabolism. These abnormalities might be caused by the dysfunction of the following endocrine gland:**
A. Adrenal cortex
B. Islets of Langergans (pancreatic islets)
**C. *Neurohypophysis**
D. Adrenal medulla
E. Adenohypophysis

**5. Amount of urine is 10 l a day. Glucose concentration in blood is normal, urine contains no glucose. S concentration may be caused by deficiency of the following hormone:**
A. Triiodthyronine
**B. *Vasopressine**
C. Oxytocine
D. Cortisole
E. Insulin

**6. A 20 year old patient complains of morbid thirst and hyperdiuresis (up to 10 l daily). Glu concentration in blood is normal but it is absent in urine. The patient has been diagnosed diab insipidus. What hormonal drug is the most appropriate for management of this disorder?**
A. Thyroxin
B. Cortisol
C. Oxytocin
**D. *Vasopressin**
E. Insulin

**7. Osmotic pressure of a man's blood plasma is 350 mosmol/l (standard pressure is 300 mosmole/l). I of all it will result in high secretion of the following hormone:**
A. Aldosteron
B. Cortisol
C. Adrenocorticotropin
**D. *Vasopressin**
E. Natriuretic

**8. Inhabitants of territories with cold climate have high content of an adaptive thermoregulatory hormone. What hormone is meant?**
A.Cortisol
B.Glucagon
C.Insulin
D.Somatotropin
**E.*Thyroxin**

**9. A patient with signs of osteoporosis and urolithasis has been admitted to the endocrinology department. Blood test has revealed hypercalcemia and hypophosphatemia. These changes are associated with abnormal synthesis of the following hormone:**
**A. *Parathyroid hormone**
B. Calcitriol
C. Cortisol
D. Calcitonin
E. Aldosterone

**10. A 2 y.o. child has convulsions as a result of lowered concentration of calcium ions in blood plasma. It is caused by reduced function of :**
A.Thymus
**B.*Parathyroid glands**
C.Hypophysis
D.Adrenal cortex
E.Pineal gland

**11. After a surgical procedure an experimental animal died from intense convultions. What endo glands were extracted?**

**A. *Parathyroid**

B. Thyroid

C. Ovaries

D. Adrenals

E. Testicles

**12. A child has abnormal formation of tooth enamel and dentin as a result of low concentration of cal ions in blood. Such abnormalities might be caused by deficiency of the following hormone:**

A. Thyrocalcitonine

**B. *Parathormone**

C. Thyroxin

D. Triiodthyronine

E. Somatotropic hormone

**13. A 5-month-old boy was hospitalized for tonic convultions. He has a life-time history of this dis Examination revealed coarse hair, thinned and fragile nails, pale and dry skin. In blood: calcium millimole/l, phosphor – 1,9 millimole/l. These changes are associated with:**

A. Hypoaldosteronism

B. Hypothyroidism

C. Hyperparathyroidism

**D. *Hypoparathyroidism**

E. Hyperaidosteronism

**15. During removal of the hyperplastic thyroid gland of a 47-year-old woman, the parathyroid gland was damaged. One month after the surgery the patient developed signs of hypoparathyroidism: frequent convulsions, hyperreflexia, laryngoslasm. What is the most likely cause of the patient's condition?**

**A.*Hypocalcemia**

B. Hyperkalemia

C. Hyponatremia

D.Hypophosphatemia

E.Hyperchlorhydria

**16. Paradontitis is treated with calcium preparations and a hormone that stimulates tooth mineraliz and inhibits tissue resorption. What hormone is it?**

A. Adrenalin

B. Thyroxine

C. Aldosterone

**D. *Calcitonin**

E. Parathormone

**17. A 35 year old man consulted a dentist about reduced density of dental tissue, high fragility of tee during eating solid food. This patient suffers the most probably from the deficiency of the following mineral element:**

**A.*Calcium**

B.Potassium

C.Sodium

D.Magnesium

E.Iron

**18. Examination of a patient revealed hyperkaliemia and hyponatremia. Low secretion of which hormone may cause such changes?**
A.Natriuretic
**B.*Aldosteron**
C.Cortisol
D.Parathormone
E.Vasopressin

**19.The person has decreased diuresis, hypernatremia, hypokalemia. Hypersecretion of what hormon can cause such changes?**
**A*. Aldosterone**
**B.** Vasopressin
**C.** Auricular sodiumuretic factor
**D.** Adrenalin
**E.** Parathormone

**20. A concentrated solution of sodium chloride was intravenously injected to an animal. This ca decreased reabsorption of sodium ions in the renal tubules. It is the result of the following chang hormonal secretion:**
A. Reduction of atrial natriuretic factor
B. Aldosterone increase
**C. *Aldosterone reduction**
D. Vasopressin increase
E. Vasopressin reduction

**21. People adapted to high external temperatures have such pecularity: profuse sweating accompained by loss of large volumes of sodium chloride. This is caused by the effect of the follo hormone upon the perspiratory glands:**
**A. *Aldosterone**
B. Natriuretic
C. Cortisol
D. Thyroxine
E. Vasopressin

**22. A patient has been given high doses of hydrocortisone for a long time. This caused atrophy of o the adrenal cortex zones. Which zone is it?**
A. Glomerular and reticular
B. Glomerular
C.
D. Reticular
**A. *Fascicular**

**23. To prevent the transplant rejection after organ transplantation it is required to admin hormonotherapy for the purpose of immunosuppression. What hormones are used for this purpose?**
A. Sexual hormones
**B. *Glucocorticoids**
C. Catecholamines
D. Mineralocorticoids
E. Thyroid

**24. A middle-aged man went to a foreign country because he had been offered a job there. Howeve had been unemployed for quite a long time. What endocrine glands were exhausted most of all in man?**

A. Substernal gland
B. Thyroid gland
C. Seminal glands
D. Parathyroid glands
**E. *Adrenal glands**

**25. On examination the patient is found to have low production of adrenocorticotropic hormone. How would this affect production of the other hormones?**

A. Increase sex hormones synthesis
**B. *Decrease hormone synthesis in the adrenal cortex**
C. Increase thyroid hormones synthesis
D. Decrease adrenocorticotropic hormones synthesis
E. Decrease insulin synthesis

**26. A 44 year old woman complains of general weakness, heart pain, significant increase of body we Objectively: moon face, hirsutism, AP is 165/110 mm Hg, height – 164 cm, weight – 103 kg; the fat is accumulated on the neck, thoracic girdle, belly. What is the main pathogenic mechanism of obesity?**

A. Increased mineralocorticoid production
**B. *Increased production of glucocorticoids**
C. Reduced production of thyroid hormones
D. Increased insulin production
E. Reduced glucagon production

**27. Examination of 43 year old patient revealed a tumour of adenohypophysis. Objectively: the pati weight is 117 kg, he has moon-like face, red-blue striae of skin distention on the belly. Osteoporosis muscle dystrophy are present. AP is 210/140 mm Hg. What is the most probable diagnosis?**

A. Cushing's disease
B. Conn's disease
**C. *Cushing's syndrome**
D. Diabetes mellitus
E. Essential hypertension

**28. Parents of a 10 y.o. boy consulted a doctor about extension of hair-covering, growth of beard, an moustache, low voice. Intensified secretion of which hormone must be assumed?**

A. Of oestrogen
B. Of progesteron
C. Of somatotropin
D. Of cortisole
**E. *Of testosterone**

**29. A girl is diagnosed with androgenital syndrome (pseudohermaphroditism). This pathology was ca by hypersecretion of the following adrenal hormone:**

A. Cortisol
B. Adrenalin
C. Aldosterone
D. Estrogen
**E. *Androgen**

**30. A 35 y.o. patient diagnosted with sterility came to gynaecological department for diagnostic biop endometrium. Microscopic examination revealed that mucous membrane is edematous, uterine gl are convoluted and filled with thick secret. Such changes of the endometrium are caused by excess o following hormone:**

A. ACTH
B. Testosterone
C. Estrogen
D. Somatotropin
**E. *Progesterone**

**31. The secretion of which hypophysial hormones will be inhibited after taking the oral contraceptiv containing sex hormones?**

A. Somatotropic hoemone
**B. *Gonadotropic hormones**
C. Thyrotropic hormone
D. Vasopressin
E. Oxytocin

**32. Usage of oral contraceptives with sex hormones inhibits secretion of the hypophysiae hormones. Secretion of which of the indicated hormones is inhibited while using oral contraceptives with sex hormones?**

**A.*Follicle-stimulating**
B.Vasopressin
C.Thyrotropic
D.Somatotropic
E.Oxytocin

**33. A 30-year old woman developed the signs of virilism (body hear growth, balding temples, disturb menstrual cycle). What hormone can cause this condition when hyperproduced?**

A.Relaxin
B. Oxytocin
C.Prolactin
D. Estriol
**E. Testosterone**

**34. A female patient presents with endocrine dysfunction of follicular cells of the ovarian follicles resulting from inflammation. The synthesis of the following hormone will be inhibited:**

A. Lutropin
B. Follistatine
**C.* Estrogen**
D. Progesterone
E. Follicle stimulating hormone

**35. Before the cells can utilize the glucose, it is first transported from the extracellular space throug plasmatic membrane inside them. This process is stimulated by the following hormone:**

A. Glucagon
B. Thyroxine
C. Adrenaline
D. Aldosterone
**E. *Insulin**

**36. A nurse accidentally injected a nearly double dose of insulin to a patient with diabetes mellitus. patient lapsed into a hypoglycemic coma. What drug should be injected in order to help him out of co**

A. Insulin
B. Noradrenaline
C. Somatotropin
**D. *Glucose**
E. Lidase