**Programmed control on "Stress" problem**

**1. Selye's triad includes:**
1. lymphoid tissue involution
2. myocardium ischemic injury
3. thymus enlarged in size
4. ulceration of gastrointestinal tract
5. adrenal cortex hyperplasia

**2. In resistance stage of GAS occurs predominately hyperplasia of:**
1. glomerular zone of adrenal cortex
2. reticular zone of adrenal cortex
3.fascicular zone of adrenal cortex

**3. Complain the chain reflecting the consequences of events which are characteristic of GAS pathogenesis**
1. increased ACTH secretion
2. CRF release
3. influence stressors an organism
4. increased propiomelanocortin secretion by pituitary gland
5. increased cortisol synthesis and secretion by adrenal cortex

**4. The first stage of GAS is characteristic of:**
1.RAAS –system activation
2. adrenal cortex involution
3. increased ACTH in the blood
4.increased blood gonadotropins
5. decreased opiate blood concentration

**5. Following signs are characteristic of the first stage of GAS:**
1. increased sympathetic tone
2. decreased cortisol production by adrenal cortex
3. decreased threshold to painful stimules
4. inhibition of RAAS-system
5. increased opioid secretion

**6. The first system which is activated during stress-reaction is:**
1. opiate system
2. sympathetic nerve system
3.pituitary-adrenal cortex system

**7. The following changes in blood cell populations characterize stress:**
1.lymphopenia 2. leukopenia 3.neutrophilia
4. eosinophilia 5.erythrocytosis

**8. Anti-inflammatory effect of glucocorticoids associated with:**
1. different membrane phospholipase activation
2. increased synthesis of lipocortin by the cells of inflammaion
3. phospholipase A2 inhibition
4. inhibition of connective tissue proliferation
5. lypooxigenase activation

**9. Point to the anti-inflammatory effects of glucocorticoids:**
1. activation of antibodies synthesis
2. decreasing in blood lymphocyte population
3. inhibition of small vessels permeability
4. supression of connective tissue elements proliferation
5. inhibition of phagocytes emigration and phagocytosis

**10. Common effects of catecholamines and glucocorticoids seem to be the following:**
1. activation of blood coagulation
2. hypertension
3. hyperglycemia
4. increasing in lipolysis
5. tachycardia

**11. Basic moments in hypertension outstanding seem to be the following:**
1. incresed basal tone of resistive vessels
2. increased blood cortisol
3. inhibition of vessels smooth muscles proliferation
4. adaptation of sinocarotid receptors to hypertensive influences
5. llipid peroxidation inhibition

**12. Role of stress in ischemic heart disease may be explained by:**
1.increased lipid peroxidation in the cardiomyocytes
2.decreased Ca++ level inside cardiomyocytes
3.tachyarrythmia
4.hypercatecholaminemia
5.activation of fibrinolysis

**13. Stress is the most important triggering factor for the following diseases:**

1.hypertonic disease
2.glomerulonephritis
3.ischemic heart disease
4.diabetes mellitus
5. stomach ulcer

**14. The following pathogenetic factors seem to be responsible for stomach ulcer disease:**

1.increased gastric acid secretion
2.high vagus tone
3.increased sympathetic tone
4.increased mucose secretion
5. active PgE secretion

**15. The role of opiates in course of stress seems to be the following:**

1. activation of sympathetic nerve system
2. restriction of sympathetic effects to the different targets
3.inhibition of interaction of adrenergic mediators with postsynaptic terminates in appropriate synapses
4.promotion of catecholamines release in adrenergic synapses

**16. Resistance stage of GAS characteristic of:**

1.increased glucocorticoid secretion
2. hypercatecholaminemia
3.inhibition of liver gluconeogenesis
4.eosinopenia
5. lymphopenia

**17. The consequences of high level of blood opiates are the following:**

1. hyperalgesia
2 increased threshold of nociceptive receptors to algesive stimules
3. decreased body temperature

**18. Anti- inflammatory effects of glucocorticoids are associated with the following:**

1.inhibition of lipocortin synthesis by the inflammatory cells
2.activation of connective cells proliferation
3.activation of antibodies synthesis
4. increased PgE synthesis
5. inhibition of arachidonic acid synthesis

**19. As for GAS in resistance stage the following hormones are increased in blood:**

1.catecholamines
2. glucocorticoids
3. mineralocorticoids
4. gonadotropins
5. growth hormone

**20. Could you call GAS as a specific reaction of an organism?**

**21. What is the difference between GAS and acute phase response?**

**22. Could you estimate all signs of GAS absolutely positive for organism?**

**23. List the stages of GAS according to Hans Selye**

**24. List protective effects of blood catecholamines high level to newborns**

1. ….. 2… 3… 4….

**25. list stress-limiting systems: 1..2..3..**

**26. Name the triad of symptoms revealed and described by Hans Selye in his experiments on stress**

1… 2… 3…