COLLOQUIUM #4
METABOLISM AND ENDOCRINE SYSTEM PATHOPHYSIOLOGY.

Questions

1. Which of the tissues are insulin- dependent and why are they called insulin-dependent?
2. Which of the tissues are insulin- independent and why are they called insulin-independent?
3. Point out the counter-regulatory insulin hormones.
4. Point out the main differences of diabetes mellitus type 1 and 2 (4).
5. Describe the mechanism of glucosuria in diabetes mellitus.
6. Describe the mechanism of hyperketonemia in insulin- dependent diabetes mellitus.
7. What symptoms are typical of ketoacidotic coma in diabetes mellitus (4)?
8. Name the causes of the development of insulin resistance(4).
9. What syndromes are typical of hyperosmotic coma (4)?
10. What are remote complications of diabetes mellitus conditioned by?
11. Point out remote complications of diabetes mellitus(5)
12. Indicate possible causes of hypoglycemia(6).
13. Describe the main manifestations of hypoglycemia.
14. Point out the main group of etiological factors of the development of diabetes mellitus type 1(3).
15. Point out the causes of the development of hyperlipidemias (6).
16. Name the factors of risk for the development of atherosclerosis (5).
17. Indicate the types of obesity according to etiology(3).
18. For what diseases is obesity a risk factor?
19. Name the syndromes developing in case of adenomas of a) zona fasciculata, b) zona glomerulata, c) zona reticulata of the adrenal cortex.
20. What changes in blood concentrations of ACTH and cortisol are typical of a)Cushing's disease, b) Cushing's syndrome?
21. Describe the mechanism of the development of steroid diabetes mellitus.
22. What is pheochromocytoma? What are its main clinical manifestations (3)?
23. What is a) primary aldosteronism, b) secondary aldosteronism?
24. Point out possible causes of the development of Addison's disease (3).
25. Point out the main manifestations of Conn's syndrome(5)
26. Describe the main manifestations of chronic insufficiency of the adrenal gland (5).
27. What is Waterhouse-Friderichsen's syndrome?
28. Describe the main manifestations of acute insufficiency of the adrenal gland (5).
29. Name possible causes of acute insufficiency of the adrenal gland (3).
30. Why doesn't the introduction of adrenalin on the background of insufficiency of the adrenal gland cause increasing of the arterial pressure?
31. What diseases (syndromes) are accompanied by a) increase in the production of the hormone of the thyroid gland, b) reduction in the production of the hormone of the thyroid gland (4)?
32. What is LATS- factor ? What role does it play in the pathogenesis of Graves' disease?
33. What syndromes develop in a) innate and b) acquired hypofunction of the thyroid gland?
34. What are the effects of excess and deficit of the hormone of the thyroid gland on the function of the sympathetic nervous system (4)?
35. How does the production of TTH and thyroxin change on the background of a) immune forms of Graves' disease, b) endemic goiter?
36. Name the main manifestations of innate hypothyroidism (5).
37. Indicate the main manifestations of myxedema (5).
38. Describe the pathogenetic factors leading to goiter formation in deficit of iodine in food (3).
39. What syndromes develop in a) excess, b) deficit of the hormone of growth?
40. Defects of what hormones are typical of Simmond's disease (5)?

41. Indicate the main consequences of hypofunction of the parathyroid gland (3).