1. A person, who came to a hospital with complaints of diarrhea, was diagnosed with amoebic dysentery. Tetracycline was prescribed to the patient as a part of complex treatment. Name the type of action of this medicine:

a. Irreversible
b. Primary
c. Reflex
d. Direct
e. Etiotropic

2. After a removal of the pyloric part of the stomach, a person may develop anemia. What is the cause of pathological condition development in this case?

a. Impaired absorption of vitamin D
b. Impaired absorption of vitamin E
c. Impaired absorption of vitamin C
d. Bone marrow dysfunction
e. Lack of intrinsic Castle factor

3. During the examination of a pregnant woman, a dentist detected 3 round formations on her oral mucosa. The formations appeared 3 days ago. They have a white-gray surface with a red rim and are up to 1 cm in diameter. What is the diagnosis in this case?

a. Catarrhal stomatitis
b. Aphthous stomatitis
c. Leukoplakia
d. Necrotizing ulcerative stomatitis
e. Gangrenous stomatitis

4. Name the sequence of special functional DNA segments and structural genes that encode synthesis of a certain group of proteins that belong to one metabolic series.

a. Operon
b. Promoter
c. Operator
d. Regulator gene
e. Terminator

5. In an experiment, an excitable cell was placed into a saline solution without sodium ions. How will it change the development of action potential in the cell?

a. Duration of the action potential increases
b. Amplitude of the action potential increases
c. Action potential does not develop
d. Amplitude of the action potential decreases
e. Duration of the action potential decreases

6. A patient has a long history of dental caries. The pulp of the affected tooth started to resemble a gray-black mass with a putrid odor. Microscopically, it is unstructured and contains microbes. What pathological process has developed in the dental pulp in this case?

a. Pulp gangrene
b. Granulating pulpitis
c. Purulent pulpitis
d. Fibrous pulpitis
e. Serous pulpitis

7. A girl presents with high fever and sore throat. Objectively, the soft palate is swollen, the tonsils are covered with gray films. The films are firmly attached and leave deep bleeding lesions when removed. What is the most likely disease in this case?

a. Pharyngeal diphtheria
b. Lacunar tonsillitis
c. Infectious mononucleosis
d. Necrotic tonsillitis

e. Pseudomembranous (Vincent's) \\ tonsillitis

8. During a surgery on the right side of the neck, excursion of the right diaphragmatic dome was disturbed. This disturbance occurred because of the damage to the following nerve:

a. Left transverse cervical nerve

b. Right phrenic nerve

c. Right transverse cervical nerve

d. Supraclavicular nerve

e. Left phrenic nerve

9. Fluorination of teeth is one of the major procedures which is used for enamel strengthening. Due to fluoride ions and fluoridation of the enamel, the teeth get protection from acidic environment and therefore dental caries is prevented. Which of the following is the most likely mechanism of fluorine's anticaries effect?

a. Teeth mineralization

b. Fluorapatite synthesis

c. Hydroxyapatite synthesis

d. Chlorapatite synthesis

e. Teeth demineralization

10. The patient's blood levels of calcium ions sharply dropped. It will result in increased secretion of a certain hormone. Name this hormone.

a. Thyrocalcitonin

b. Parathyroid hormone

c. Vasopressin

d. Somatotropin

e. Aldosterone

11. At autopsy, section of the right ovary shows a round lesion 2.5 cm in diameter with a clear serous fluid, surrounded by a smooth glistening membrane. Which of the following macroscopic lesions best represents the autopsy findings?

a. Ulcer

b. Cyst

c. Nodule with central necrosis

d. Nodule

e. Infiltrate

12. A patient has arterial hypertension with signs of angina pectoris. The patient has been prescribed an antianginal drug that is a calcium antagonist. Name this drug.

a. Anaprilin (Propranolol)

b. Metoprolol

c. Pentoxifylline

d. Amlodipine

e. Molsidomine

13. A 60-year-old man with diabetes mellitus is prescribed insulin. What type of pharmacological therapy is it?

a. Pathogenetic

b. Symptomatic

c. Preventive

d. Substitution

e. Etiotropic

14. After a facial injury, the patient has a hematoma on the cheek. What salivary gland is likely to have its outflow blocked by this hematoma?

a. Buccal

b. Parotid

c. Submandibular

d. Labial

e. Sublingual

15. Persistent and heavy proteinuria (albuminuria) associated with nephrotic syndrome leads to hypoalbuminemia, which changes plasma pressure resulting in severe generalized edema. According to the description which of the following circumstances tends to cause nephrotic edema?

a. Decreased venous pressure

b. Decreased plasma oncotic pressure

c. ---

d. Increased plasma oncotic pressure

e. Increased tissue hydrostatic pressure

16. A patient has been hospitalized into the intensive care unit in a severe condition. It is known that he mistakenly took sodium fluoride that blocks cytochrome oxidase. What type of hypoxia has developed in the patient?

a. Hypoxic hypoxia

b. Hemic hypoxia

c. Cardiovascular hypoxia

d. Respiratory hypoxia

e. Tissue hypoxia

17. Ulcer disease of the duodenum has been detected in a 38-year-old man. A treatment was prescribed, after which the patient considered himself to be healthy. However, half a year later the patient developed pain in the epigastrium, heartburn, and insomnia. The patient's condition can be estimated as a:

a. Relapse

b. ---

c. Latent period

d. Development of chronic disease

e. Remission

18. A patient was diagnosed with peptic ulcer disease of the stomach and prescribed an antibacterial treatment. This treatment will be aimed against the following causative agent:

a. Cl. trachomatis

b. St. aureus

c. Cl. perfringens

d. E) coli

e. H. pylori

19. A patient complains of an extremely runny nose and lost sense of smell. Where in the nasal cavity are located the receptors of the olfactory analyzer?

a. Middle nasal meatus

b. Choanae

c. Inferior nasal meatus

d. Common nasal meatus

e. Superior nasal meatus

20. A research lab is investigating the rate of differentiation of hematopoietic cells in order to better understand acute myeloid leukemia in children. A bone marrow biopsy of a 6-year-old boy shows the differentiation stage in which hemopoietic cell extrudes its nucleus. Which of the following processes is most likely assiociated with biopsy findings?

a. Monocytopoiesis

b. Lymphocytopoiesis

c. Thrombopoiesis

d. Erythropoiesis

e. Granulopoiesis

21. A 33-year-old patient complains of an impairment of skin sensitivity in the medial part of the dorsal and palmar surface of hand. Which nerve is damaged?

a. N. radialis

b. N. musculocutaneus
c. N. medianus
d. N. cutaneus antebrachii medialis
e. N. ulnaris

22. A patient feels pain and numbness in the gums of the upper jaw. What nerves are most likely to be damaged in this case?
a. N. alveolaris inferior
b. N. buccalis
c. Nn. alveolaris superiores (n. maxillaris)
d. N. facialis
e. N. lingualis

23. Histological microslide shows cells that form isogenic groups. The intercellular substance contains glycoproteins, proteoglycans, and collagen fibers. What tissue is it?
a. Cartilaginous tissue
b. Mucous tissue
c. White adipose tissue
d. Brown adipose tissue
e. Bone tissue

24. A 36-year-old male comes to the dental office for extraction of the tooth. Two weeks after the procedure is performed, the stratified squamous epithelium regenerates at the site of extraction. Which of the following organelles is most likely involved in the mucosa regeneration?
a. Mitochondria
b. Smooth endoplasmic reticulum
c. Lysosomes
d. Centrosomes
e. Ribosomes

25. Ribosomes are the organelles that bind amino acid residues into a polypeptide chain. The number of ribosomes in the cells of different organs varies and depends on the function of the organ. What organ has the highest ribosome count in its cells?
a. Urinary bladder
b. Epithelium of the renal tubules
c. Secretory cells of the pancreas
d. Outermost layer of epidermis
e. Epithelium of the small intestine

26. A 70-year-old patient is brought to the emeregency department by his son because of blurry vision and dysarthria. His son says, that the father is always thirsty and has difficulty with urination. Examination reveals dry skin, cutaneous vasodilation, nonreactive mydriasis, and hyperthermia. Drug overdose is suspected. Which of the following drugs is the most likely cause of this patient's toxicity?
a. Metamizole
b. Reserpine
c. Clonidine
d. Atropine
e. Carbachol

27. In microanatomy of some organs, there is a sheet-like structure, which underlies virtually all epithelia. It consists of basal lamina (made of type IV collagen, glycoproteins, and proteoglycans) and reticular lamina. Under the microscope, you can see it as a pink line under the epithelial cells. Which of the following is described above?
a. Basement membrane
b. Nucleus
c. ---
d. Plasma membrane
e. Endoplasmic reticulum

28. A 10-year-old Indian boy is brought by his parents to a dentist for a routine dental care. They want to remove the noticeable yellow discoloration of his teeth. His mother reports that they immigrated to Ukraine approximately 6 months ago and a lot of children in their state had the similar staining of their teeth. On intraoral examination there are isolated areas of brown staining, which is particularly severe on the incisors and canines. In addition, some areas have pits which expose the underlying dentin. Which of the following is the most likely diagnosis?

a. Enamel hypoplasia
b. Demineralization stage of caries
c. Acid erosion
d. Enamel erosion
e. Fluorosis

29. A 40-year-old male has hearing impairment and paresis of facial muscles resulting from a blow to his head. He was diagnosed with a hematoma of cerebellopontine angle. What nerves had been damaged?

a. VII, VIII pairs of cranial nerves
b. VIII, IX pairs of cranial nerves
c. ---
d. V, VI pairs of cranial nerves
e. IX, X pairs of cranial nerves

30. Autopsy of the body of a 69-year-old woman, who was overeating and died of an acute myocardial infarction, detected numerous whitish, dense formations in the intima of the coronary arteries. The formations protrude into the vascular lumina, sharply narrowing them. What stage of atherosclerosis can be characterized by these changes?

a. A stage of atheromatous ulcer formation
b. Atherocalcinosis
c. Lipoidosis
d. Liposclerosis
e. Atheromatosis

31. An excessive bone tissue loss is often observed in older people, which indicates osteoporosis development. What bone tissue cells are activated, resulting in the development of this disease?

a. Osteoblasts
b. Osteoclasts
c. Osteocytes
d. Macrophages
e. Tissue basophils

32. After an injury, the patient developed a focus of purulent inflammation in the alveolar process of the jaw in its outward area, with the development of subperiosteal abscess and edema of the adjacent soft tissues. What is the most likely diagnosis in this case?

a. Serous periostitis
b. Chronic fibrous periostitis
c. Purulent periostitis
d. Ossifying periostitis
e. Chronic hyperplastic periostitis

33. A 50-year-old patient suddenly developed headache, dizziness, and nausea. Blood pressure --- 220/110 mm Hg. During the intravenous administration of a 0.1% hygronium solution (trepirium iodide), the patient's condition improved. What is the mechanism of action of this drug?

a. Blockade of ganglionic nicotinic receptors
b. Blockade of Ca^·++ channels
c. Activation of alpha_2-adrenoceptors
d. Angiotensin-converting enzyme blockade
e. Blockade of beta_1-adrenoceptors

34. The dentist should inject a local anesthetic to reduce pain sensation in the maxillary molars and

adjacent facial soft tissue and gingiva. He inserts the needle through oral mucosa at the height of the maxillary vestibular fornix just posterior to the maxillary tuberosity. The needle is directed medially and superiorly toward the alveolar canals. Which of the following nerves is most likely to be blocked?

a. Buccal nerve
b. Inferior alveolar nerve
c. ---
d. Nasopalatine nerve
e. Posterior superior alveolar nerve

35. A patient diagnosed with tuberculosis developed red coloring of urine, saliva, and tear fluid after starting the treatment of this disease. Red spots appeared on the patient's underwear. What drug could have caused these phenomena?

a. Isoniazid
b. Rifampicin
c. Iodine alcohol solution
d. Ciprofloxacin
e. Benzylpenicillin sodium salt

36. A 30-year-old patient was diagnosed with a tumor of the body of the mandible that appeared several months ago. Macroscopically, the tumor was represented by a dense whitish tissue that was destroying the patient's jawbone. After its removal, the tumor was examined microscopically. It was revealed that the tumor consisted of a network of odontogenic epithelial strands with various types of branching. What kind of tumor did the patient have in this case?

a. Acanthomatous ameloblastoma
b. Plexiform ameloblastoma
c. Basal cell ameloblastoma
d. Follicular ameloblastoma
e. Granular cell ameloblastoma

37. A patient has been prescribed pyridoxal phosphate. What processes are corrected with this drug?

a. Synthesis of purine and pyrimidine \\ bases
b. Transamination and decarboxylation \\ of amino acids
c. Oxidative decarboxylation of keto \\ acids
d. Protein synthesis
e. Deaminization of amino acids

38. What factor results in maximal dilation of the gemomicrocirculatory pahtway vessels and their increased permeability?

a. Vasopressin
b. Noradrenaline
c. Serotonin
d. Endothelin
e. Histamine

39. A cytochrome oxidase blocker was given to a test animal, causing its instant death. What chemical can cause these changes?

a. Potassium phosphate
b. Potassium oxalate
c. Potassium nitrite
d. Potassium sulfate
e. Potassium cyanide

40. An extreme undernourishment, known as starvation, can be caused by insufficient protein intake. As an example, Kwashiorkor is a form of malnutrition caused by a lack of protein in the diet where decreased plasma protein concentration leads to increased filtration of fluid into interstitium. Which of the following proteins is the most likely cause of decreased oncotic plasma pressure in a starving patient?

a. β-globulins

b. Albumin
c. Fibrinogen
d. α-globulins
e. γ-globulins

41. A 52-year-old woman came to a neurologist with complaints of the loss of sensitivity in the skin of the right half of her face in the area of the lower eyelid, nasal bridge, and upper lip. What nerve branch is damaged in this case?
a. Ophthalmic division of the trigeminal nerve
b. Mandibular division of the trigeminal nerve
c. Greater petrosal nerve, a branch of the facial nerve
d. Maxillary division of the trigeminal nerve
e. Chorda tympani, a branch of the facial nerve

42. A 42-year-old female comes to the physician 2 days after the sudden onset of pain and swelling of her right knee. She has had no injury. Examination of the right knee shows warmth, erythema, and effusions. Laboratory studies show an increase in the concentration of acute phase reactants. Which of the following is the most appropriate pharmacotherapy for this patient?
a. Opioids
b. Sulfonamides
c. Antibiotics
d. Antidepressants
e. Nonsteroidal anti-inflammatory drugs (NSAIDs)

43. Among the amino acids that contain a hydroxyl group, one is of the greatest importance in the formation of the structure of collagen and the organic matrix of the tooth. What is this amino acid?
a. Homoserine
b. Threonine
c. Oxyproline
d. Tyrosine
e. Serine

44. A 66-year-old male is brought to the emergency department with central chest pain for 1 hour. He rates his pain as severe, dull in character and it is associated with profuse sweating and shortness of breath. Physical examination reveals a blood pressure of 100/70 mm Hg, pulse --- 115/min, oxygen saturation of 95% on room air. An electrocardiogram is done and shows ST elevation in leads II, III and avF which is consistent with an acute myocardial infarction. The patient is given oral aspirin, sublingual nitroglycerine and intravenous morphine. Which of the following is the most likely mechanism of action of morphine?
a. Adenylyl cyclase activator
b. Acetylcholinesterase inhibitor
c. Opioid receptors agonist
d. Histamine receptor antagonist
e. Phosphodiesterase inhibitor

45. Dentists have high risk of contracting viral hepatitis type B in the course of their duties and therefore are subject to mandatory vaccination. What vaccine is used in such cases?
a. Inactivated vaccine
b. Recombinant vaccine
c. Chemical vaccine
d. Live vaccine
e. Anatoxin

46. A 6-year-old girl with diphtheria is administered an intravenous injection of diphtheria antitoxin. Ten days after the initial administration of drug, she develops a pruritic rash, fever, and arthralgias. Which of the following is the most likely diagnosis?
a. Atopy
b. Allergic contact dermatitis

c. Serum sickness
d. Anaphylaxis
e. Delayed type hypersensitivity

47. Treatment of a patient with hereditary form of immunodeficiency involved gene therapy: the enzyme gene was introduced into the cells of the patient by means of a retrovirus. What property of the genetic code allows to use retroviruses as vectors of functional genes?
a. Redundancy
b. Universality
c. Specificity
d. Continuity
e. Collinearity

48. Filopodia of megakaryocytes pass through the pores of the sinusoidal capillaries of the red bone marrow into the lumen of blood vessels, where they are fragmented into individual laminae. What blood corpuscles are formed this way?
a. Platelets
b. Reticulocytes
c. Erythrocytes
d. Lymphocytes
e. Monocytes

49. Examination of an oral cavity shows puffy gums, pus between teeth and gums, contact bleeding. The dentist suspects gum infection that damages the soft tissue and destroys the bone that supports the teeth. This pathology can cause teeth to loosen or lead to tooth loss. Which of the following is the most likely diagnosis?
a. Galvanosis
b. Acute sialadenitis
c. Xerostomia
d. ---
e. Periodontitis

50. A patient cannot lift the lowered mandible. What muscles fail to perform their function in this case?
a. Epicranius muscle
b. Mimic muscles
c. Orbicularis oris muscle
d. Masticatory muscles
e. Levator anguli oris muscle

51. For early detection of a pregnancy, a urinalysis is performed. What hormone is likely to indicate pregnancy, if it is present in the woman's urine?
a. Aldosterone
b. Chorionic gonadotropin
c. Testosterone
d. Progesterone
e. Estriol

52. There is a 7-year-old child with complains of cough, lacrimation, rhinitis, skin rash, photophobia and three-day-long fever as high as 38°C) Physical examination has revealed the following: conjunctivitis; bright red maculopapular rash covering the skin of face, neck and torso; hyperemic pharynx; serous purulent secretions from the nose; dry rales in the lungs. What is the most probable diagnosis?
a. Rubella
b. Adenovirus infection
c. Measles
d. Scarlet fever
e. Chicken pox

53. Preventive examination of a 9-year-old girl has revealed one matte white spot (chalk-like and lacking its natural luster) on the enamel in the cervical region on the vestibular surface of her tooth 21. The girl has no subjective complaints. What is the most likely diagnosis in this case?

a. Initial caries
b. Dental erosion
c. Superficial caries
d. Fluorosis
e. Enamel hypoplasia

54. What infectious-allergic disease is associated with the development of bilateral diffuse or focal non-purulent inflammation of the glomerular apparatus of the kidneys with characteristic renal and extrarenal symptoms?

a. Polycystic kidney disease
b. Nephrolithiasis
c. Pyelonephritis
d. Glomerulonephritis
e. Nephrosclerosis

55. A baby has a delay in eruption of the first teeth. What vitamin is deficient in this baby?

a. PP
b. A
c. E
d. D_{3
e. K

56. A 10-year-old boy is brought to the physician by his parents because of fever, cough, and fatigue. He has been admitted to the hospital five times because of pneumonia. Attempts to induce immunity using the pneumococcal vaccine have failed. The first hospitalization was at the age of 12 months. Laboratory findings show marked reduction in all classes and subclasses of serum immunoglobulins. Which of the following immune cells is most likely to be reduced in the peripheral blood of this patient?

a. Neutrophils
b. NK-cells
c. Macrophages
d. B-cells
e. T-cells

57. A 6-year-old child with suspected active tuberculosis has undergone Mantoux test. What immunobiological substance was administered for this purpose?

a. BCG vaccine
b. DT vaccine
c. DPT vaccine
d. Tuberculin
e. Tularin

58. After the transfusion of the concentrated red blood cells the patient developed posttransfusion shock. What is the leading mechanism of acute renal failure in this case?

a. Tubular reabsorption disorder
b. Impairment of the renal incretory \\ function
c. Tubular secretion disorder
d. Glomerular filtration disorder
e. Urinary excretion disorder

59. A patient, who was taking a highly effective anti-tuberculosis drug, has developed gynecomastia at the end of the treatment course. What drug has caused this side effect?

a. Ethambutol
b. Isoniazid
c. Rifampicin

d. Ciprofloxacin
e. Florimycin sulfate (Viomycin sulfate)

60. A patient with ciliary arrhythmia and a history of bronchial asthma should be prescribed an antiarrhythmic drug. What antiarrhythmic drug is contraindicated in this case?
a. Verapamil
b. Anaprilin (Propranolol)
c. Nifedipine
d. ---
e. Ajmaline

61. The patient's blood has a C-reactive protein that chemically can be classified as a glycoprotein. What pathology does it indicate?
a. Rheumatism
b. Thrombocytopenia
c. Porphyria
d. Anemia
e. Leucopenia

62. Lab rats were used to study the effect of a certain vitamin on the body. Deficiency of this vitamin has resulted in a disturbed reproductive function and skeletal muscle dystrophy. What vitamin is it?
a. A
b. D
c. E
d. K
e. B_2

63. A previously healthy 8-year old boy is brought to the emergency department by his parents because of fever and progressively worsening sore throat and dysphagia. Physical examination shows pharyngeal erythema with tender left and right cervical lymphadenopathy. Contrast-enhanced computed tomography (CT) shows fluid accumulation in the retropharyngeal space. A diagnosis of retropharyngeal abscess is suspected. Which of the following fasciae is most likely involved in this process?
a. Temporal fascia
b. Buccopharyngeal fascia
c. Parotid fascia
d. Masseteric fascia
e. ---

64. All of the teeth in the mouth together are referred to as the dentition. Humans have two dentitions throughout life: one during childhood, called the primary dentition, and one that will hopefully last throughout adulthood, called the permanent (secondary) dentition. The first permanent molars usually begin their eruption by/at:
a. Birth
b. Four to five years of age
c. Twelve months of age
d. ---
e. Six to seven years of age

65. The liquidator of the consequences of the accident at the Chornobyl nuclear power plant received an ionizing radiation dose of 6 Gray. What changes in the leukocyte formula can be expected in this patient in 10 days?
a. Lymphocytosis
b. Basophilia
c. Leukocytosis with lymphocytopenia
d. Agranulocytosis
e. Eosinophilia

66. In the experiment an investigator reveals that glucose is actively taken up by cells (except brain

cells). Moreover, gluconeogenesis in liver is stimulated and glycogen synthesis in liver and muscles is increased. Which of the following hormones is most likely responsible for these changes?

a. Triiodothyronine (T3)
b. Somatostatin
c. Insulin
d. Aldosterone
e. Glucagon

67. A 56-year-old woman comes to the emergency department complaining of severe abdominal pain for the last several hours. The pain is cramp-like in nature, constant and has worsened over time. She gives a history of episodic right upper abdominal pain for the past few months, mostly after consuming fatty foods, radiating to the tip of the scapula. Ultrasound of the gallbladder shows hyperdense structures with an acoustic shadow (gallstones) and a thickened wall. Which of the following processes is most likely disturbed in presence of the stone in the gallbladder?

a. Hydrochloric acid (HCl) secretion in stomach
b. Inhibition of saliva secretion
c. Proteins digestion to amino acids
d. Emulsification of lipids
e. Carbohydrates digestion to monosaccharides

68. A girl provisionally diagnosed with Turner syndrome made an appointment with a genetic consultancy. What genetic method of diagnostics can confirm this diagnosis?

a. Dermatoglyphics
b. Genealogy
c. Hybridology
d. Biochemistry
e. Sex chromatin identification

69. Experimental studies of membrane ionic currents in the dynamics of action potential development have shown that the ionic current that causes the repolarization phase can be classified as:

a. Passive sodium current
b. Active potassium current
c. Active chlorine current
d. Passive potassium current
e. Active sodium current

70. Examination of a 40-year-old woman detected increased basal metabolism. What hormone levels are excessive in this woman, causing her pathological condition?

a. Thyrocalcitonin
b. Somatostatin
c. Glucagon
d. Triiodothyronine
e. Aldosterone

71. A patient has made an appointment with a dentist. A cavity was detected in the softened dentin of his premolar. A narrow layer of dentin remains between the carious cavity and the pulp. What is the most likely diagnosis in this case?

a. Fluorosis
b. Superficial caries
c. Deep caries
d. White spot lesion
e. Median caries

72. Biochemical analysis of amino acid composition of freshly synthesized polypeptides shows that in the process of translation, in each of these proteins the first amino acid is always the same one. Name this amino acid.

a. Phenylalanine
b. Serine

c. Methionine
d. Isoleucine
e. Histidine

73. Due to the presence of a malignant tumor on the tongue, the patient has been referred for its surgical removal. Where is it easy to find the lingual artery and ligate it?
a. Pirogov triangle
b. Omotrapezoid triangle
c. Carotid triangle
d. Omoclavicular triangle
e. Omotracheal triangle

74. A 40-year-old patient suffers from intolerance of dairy food products. This condition has likely developed due to insufficiency of the following digestive enzyme:
a. Amylase
b. Invertase
c. Maltase
d. Lactase
e. Lipase

75. A 49-year-old man comes to his physician with complaints of moderate headaches and profuse sweating. He mentions that his coworkers have made comments about his apparent increase in gloves and boots size. He says that since he joined his company 10 years ago he has changed the size of clothes at least 4 times. Physical examination shows hyperhidrosis, noticeable large pores, hypertrichosis, widely spaced teeth and prognathism. Which of the following is the most likely cause of this pathology?
a. ---
b. Excess secretion of vasopressin
c. Excess secretion of growth hormone
d. Decreased secretion of insulin
e. Decreased secretion of glucocorticoids

76. When examining the patient's oral cavity, the dentist noticed a significant tremor of the tongue. Exophthalmos is observed in the patient, as well. The doctor advised the patient to consult an endocrinologist. During the examination, the diagnosis of Basedow's disease was made. This condition is mainly caused by the hyperfunction of certain cells. Name these cells.
a. Endocrinocytes of the zona glomerulosa of the adrenal cortex
b. Parathyrocytes
c. Parafollicular cells
d. Thyrocytes
e. Endocrinocytes of the zona fasciculata of the adrenal cortex

77. During examination of the patient's oral cavity, a dentist noticed deformation of the teeth and a crescent indentation on the upper right inscisor. The teeth are undersized, barrel-shaped --- tooth cervix is wider than its edge. The patient uses a hearing aid, suffers from visual impairment. What type of syphilis affects teeth in such a way?
a. Late congenital
b. Neurosyphilis
c. Early congenital
d. Secondary
e. Primary

78. A 37-year-old male was admitted to a hospital complaining of abdominal pain, difficulty in swallowing and breathing, constipation, and nausea. He developed respiratory failure and required endotracheal intubation and ventilation. Two days before, the patient consumed dried salted fish bought from an artisanal producer. Laboratory investigation for infectious pathogen was performed using Kitt-Tarozzi's method. Observation under a bright field microscopy revealed the presence of typical microorganisms with <<tennis racket>> appearance. Which of the following is the most likely

diagnosis?

a. Nontyphoidal Salmonella infection
b. Typhoid fever
c. Cholera
d. Shigella infection
e. Botulism

79. A 45-year-old female patient has neurosis with irritability, insomnia, amotivational anxiety. What tranquilizer will be able to eliminate all symptoms of the disease?

a. Piracetam
b. Diazepam
c. Levodopa
d. Caffeine-sodium benzoate
e. Paracetamol

80. A 10-day-old baby has undergone a surgery for cleft upper lip (<<hare lip>>). A split upper lip is caused by:

a. A non-union of the third branchial arch
b. A non-union of the tori palatini on the maxillary processes of the first branchial arch
c. A non-union of the second branchial arch
d. A non-union of the frontal and maxillary processes of the first branchial arch
e. A non-union of the maxillary and mandibular processes of the first branchial arch