INFLAMMATION

1. What is inflammation:
   1. Selective anti-infective pathological reaction.
   2. Pathological process, typical for vascularized tissues.
   4. Disease with unknown etiology.
   5. 1, 3.

2. Inflammation is a unity between:
   1. Alteration, exudation, proliferation.
   2. Functional and structural disorders.
   3. Local and general manifestations.
   5. 1, 2, 3.
   6. 1, 2, 3, 4.

3. Exogenous causes of inflammation are:
   1. Bacteria, viruses, fungi, parasites, insects
   2. Acids, bases, salts, drugs, toxins.
   3. Trauma, foreign bodies, thermal factors, ionizing radiation, electricity.
   4. Deposition of uric acid, urea, bile and other tissue.
   5. 1, 2, 3.
   6. 1, 2, 3, 4.

4. Endogenous causes of inflammation are:
   1. Deposition of bile, urea, uric acid, of, calcium salts and more.
   2. Products of tissue decay, hemorrhage, thrombosis, embolism, heart attacks.
   3. Deposition of immune complexes.
   5. 1, 2, 3.
   6. 1, 2, 4.

5. Which are the main phases of inflammation in their "sequence":
   1. Initiation, promotion, progression.
2. Alteration, exudation, proliferation.
3. Alteration, promotion, progression.
4. Initiation, exudation, progression.
5. Alteration, progression, proliferation.

6. Inflammatory alteration is:
   1. Programmed irreversible cell and tissue damage.
   2. Reversible cellular lesion.
   3. Spontaneous genome mutation.
   4. Irreversible cell and tissue damage.
   5. 1, 3.

7. Alteration is a process of:
   1. Rearrangement of cells and extramedullar matrix.
   2. Formation of exudate.
   3. Cell matrix and plasma proteins damage.
   4. Progressive cell proliferation.
   5. Cells infiltration.

8. Primary alteration occurs as a result of:
   1. Mediators released.
   2. The damaging action of the pathogen.
   3. Lysosomal hydrolytic enzymes.
   4. Activated platelets.
   5. Activated white blood cells.

9. The bioactive substances released during alteration are called:
   1. Mediators.
   2. Synchronizing factors.
   4. Agglutinins.
   5. Inhibitors.
10. Which of the following statements is true about mediators?
   1. They cause the reactions in the inflammatory process.
   2. They modulate (positively or negatively) the inflammatory process.
   3. They inhibit the exudative phase.
   4. They co-stimulate the development of the inflammatory process.
   5. They reprogram the genome of macrophages.

11. Important for the occurrence of cell alteration is:
   1. The lost ability for contact inhibition.
   2. Alteration of the cell membrane.
   4. Decreased mechanical resistance of cells.
   5. Obligatory opsonization of cells.

12. Of great importance for the alteration is:
   1. Decreased levels of cyclooxygenase products
   2. Hydrolytic enzymes, released by the damaged lysosomes.
   3. The limited activity of the enzymes of the electron transport chains in
      the mitochondria.
   4. Structural alterations of cell receptors.
   5. Blocked activity of free radicals.

13. Which of the following biologically active substances may also act as
    modulators:
    1. Serotonin, histamine.
    2. Reactive oxygen species.
    3. Prostaglandins and cAMP.
    5. The complement system, neutrophil chemotaxis factor.

14. Point out the role of the modulators in the process of inflammation:
    1. They inhibit the metabolites of the arachidonic acid.
    2. They block the kinin and the complement systems.
    3. They stimulate the secretion of growth factors and the proliferation
       phase.
4. Enhance or inhibit the mediator-initiated inflammatory process.
5. They are not involved in inflammation.

15. The released lysosome enzymes mainly:
   1. Stimulate the phase of proliferation.
   2. Increase capillary permeability and destroy cells.
   3. Play the role of intercellular regulators.
   4. Block the kinin system.
   5. Provoke autoimmune progression.

16. The hemodynamic vascular changes in inflammation in chronological order are:
   1. Arterial hyperemia, spasm of the arterioles, stasis.
   2. Stasis, arterial hyperaemia, venous hyperaemia.
   3. Ischemia, thrombosis, arterial hyperemia.
   4. Spasm, reversible ischemia, venous hyperemia.
   5. Spasm, arterial hyperaemia, venous hyperaemia, stasis.

17. Permeability disturbances in inflammation are a result of:
   1. Hemodynamic changes in blood vessels.
   2. Structural changes in blood vessel walls.
   3. Disturbed speed of blood flow.
   4. Smooth-muscle hypertrophy.
   5. Alteration in receptor structure

18. Exudation is:
   1. The effusion of plasmatic fluid and proteins from the microcirculation to the inflammatory focus.
   2. Accumulation of fluid and proteins in the inflammatory focus, independent of microcirculation.
   3. A process of rearrangement of interstitial fluid in the inflammatory focus.
   4. Movement and congestion of cellular fluid in the inflammatory focus.
   5. A process of decreased lymph drainage.
19. A main pathogenic factor for exudate formation is:
   1. Impeded blood drainage.
   2. Increased vascular permeability.
   3. Primarily increased oncotic pressure in the inflammatory focus.
   4. Sodium metabolism disturbances.
   5. Hormonal disturbances /aldosterone and ADH/.

20. The early cell migration during the acute inflammation is associated with:
   1. Fibroblast proliferation.
   2. Accumulation of neutrophils.
   3. Active diapedesis of erythrocytes.
   4. Proliferation of angioblasts.
   5. Eosinophils and basophils.

21. Which of the processes is affected to the highest extent by adhesion molecules deficit:
   1. Proliferation
   2. Alteration.
   3. Emigration.
   4. Regeneration.
   5. Exudation.

22. The leucocytes that have migrated into the inflammatory focus:
   1. Execute opsonization of the pathogenic agent.
   2. Phagocyte bacteria and dead cells.
   3. Participate in the “cleaning” phase.
   4. Act as matrix for proliferation.
   5. 2, 3.
   6. 1, 2, 3, 4.

23. Suppressed phagocytosis complements to the inflammation:
   1. More effective development.
   2. Definitely pathological character.
   4. Ability of unusual development.
   5. Obligatory chronification.
24. The phase of proliferation includes:
   1. Alteration of cells and intercellular matter by the pathological agent.
   2. Growing of connective tissue and capillaries.
   3. Formation of inflammatory oedema.
   4. Hemodynamic vessel changes.
   5. 1, 3.
   6. 2, 3, 4.

25. Which of the local signs of inflammation is related to the increased vessel permeability:
   1. Redness.
   2. Swelling.
   4. Increased temperature (heat).
   5. Disturbed function.

26. According to the prevailing pathological processes, the inflammation could be:
   1. Alterative, exudative, proliferative.
   2. Hypo-, normo-, hyperergic.
   3. Specific, non-specific.
   4. Viral, bacterial, immunologic.
   5. Typical, atypical.
   6. 1, 3, 5.

27. An inflammation could be accepted as chronic when its duration is over:
   1. 6 hours.
   2. 6 days.
   3. 6 weeks.
   4. 6 months.
   5. 6 years.
   6. It is not related to duration, but to the nature of the cellular alteration.
28. Chronic inflammation is characterized with a more pronounced infiltration with:

1. Adipocytes and segmented leukocytes.
2. Tissue degradation products.
3. Platelets and B-lymphocytes.
4. Mast cells and erythrocytes.
5. Lymphocytes and macrophages.