

LESSON № 17

Topic: EXTREME CONDITIONS. STRESS. SHOCK. COMA. COLLAPSE

Aim of the lesson: to study the pathogenesis of stress, stroke, coma, and collapse.

QUESTIONS:

1. Pathogenic action of environmental factors. Pathogenic physical factors. Mechanical Factors. Local sequelae of mechanical injury.
2. The general effects of mechanical injury.
3. Effects of electric energy.
4. Stress. General adaptation syndrome. Theory of stress (H. Selye, 1938).
5. Pathophysiology of stress. The role of sympathoadrenal and hypothalamohypophyseal systems in stress.
6. Stress stages.
7. Distress syndrome.
8. Shock. Definition.
9. Shock. Types, etiology, stages of shock and their mechanisms, manifestations.
10. Major types of shocks. Hypovolemic, cardiogenic, distributive (septic, neurogenic, anaphylactic) shock.
11. Mechanisms of compensation and decompensation during shock.
12. Collapse: characteristics, types, etiology, pathogenesis, manifestations, principles of treatment.
13. Differences between collapse and shock.
14. Coma. Definition. Causes and types, general pathogenesis, manifestations.
15. Terminal states (preagony, agony, clinical and biological death).
16. Pathophysiological fundamentals of resuscitation
17. Postresuscitation distress.

LITERATURE:

1. Lecture material.
2. General and clinical pathophysiology / ed. by A.V. Kubyshev. –

Vinnytsa: Nova Knyha Publishers. – 2011. – P. 641-651.

3. Litvitsky P.F., Pirozhkov S.V., Tezikov E.B. Pathophysiology: Concise Lectures, test, clinic-pathophysiological situations and clinic-laboratory problems. Students manual / Moscow «Geotar-Media». – 2012. – P. 82-88.

4. Pathophysiology / ed. by C. Paradiso (Lippincott's review series). – 1995. – P. 77-90.

5. Selye H., [Experimental evidence supporting the conception of «adaptation energy»](#), Am. J. Physiol. – 1938. – V. 123. – P. 758-765.

