CONTENTS OF EDUCATIONAL MATERIAL

1. Discipline "Forensic Medicine"

Forensic medicine, its content and objectives. Forensic medical examination. Connection between forensic medicine and other sciences. Research methods in forensic medicine. Place of forensic medicine in present higher medical education. Emergence of forensic medicine and a brief history of its development.

Types of practical activities of a forensic pathologist. Definition of the terms "forensic pathologist" and "forensic examination." Goals, objectives and objects of forensic examinations. Types of forensic examinations. Grounds and procedures for conducting forensic examination. Cases of mandatory forensic examinations. Participation of a forensic pathologist in the investigation process (scene examination, corpse examination on the scene of the crime or accident, fact-finding experiment, etc.).

2. Forensic Thanatology

2.1. *Dying and death. Post-mortem changes. Post-mortem examination (demonstration). Post-mortem examination of newborns*

Thanatology (death studies). Terminal states and their forensic significance. Clinical and natural death. Imaginary death. Statement of death. Reliable indicators of death. Speed of dying. Morphology of acute (quick) and agonal (slow) death. Use of cadaveric organs and tissues for transplantation. Legal, ethical and medical aspects of reanimation and transplantation. Concept of cause and genesis of death. Forensic classification of death (category, kind, type of death). Early cadaveric changes. Corpse cooling. The phenomenon of partial (local) drying up. Cadaveric spots. Muscle stiffness. Autolysis. Late cadaveric changes. Putrefaction. Forms of preservation of the late cadaveric changes: mummification, adipocere, tanning. Fauna and flora development on a corpse. Reasons for forensic examination of a corpse. Differences between a forensic examination and an pathologicoanatomic examination. Documentation of forensic examination of a corpse: "Forensic examination report", its structure and contents. Differences between antemortem injuries and post-mortem injuries. Principles of making forensic diagnosis and drawing forensic conclusions. Sudden death and its causes. Key issues resolved during a newborn corpse examination. Establishment of being a the newborn, full-term, maturity, live birth, vitality and life duration after birth/delivery. Distinctive features of newborn autopsy. The reasons for non-violent death of foetuses and neonates before, during and after delivery. Violent death and its causes. Infanticide: concept definition and types of it.

2.2. Corpse examination on the scene

The definition of a crime scene examination. Organization, its participants. Reasons and grounds for examination of the scene, the main purposes of the examination. Stages of examination: stative and dynamic. Stages of crime scene investigation and tasks of a forensic pathologist. The main tasks of a forensic pathologist or other specialist doctor during external examination of the corpse on the scene of the accident or discovery. Procedures and methods of corpse examination. Assisting an investigator in displaying, impressment, packaging and transporting of exhibits of biological origin.

3. Documentation of forensic expertise

The contents and main parts of a "Forensic report" after corpse examination and that of a living person. Forensic report requirements. Procedure of transferring a forensic report to a investigation and judicial authorities.

4. Forensic examination of mechanical damage

4.1. Common questions of forensic traumatology. Blunt force injuries.

Concept definition of "bodily injury". The main classification of injury (based on injury factor, nature and degree). Traumatism and its types. Causes of traumatism. The significance of forensic expertise in the prevention of various types of traumatism. Mechanical injuries and their morphological characteristics: abrasions, bruises, wounds, dislocations, fractures, ruptures and separation of body parts. Complications and their morphological characteristics. Methods to describe bodily injury.

Concept definition and classification of blunt objects. Mechanism of action of blunt objects on the human body and the nature of the damage caused. Ways of determining of the type of blunt object and the mechanism of its action taking into consideration the specifics of bodily injuries and the victim's clothing. Bodily injuries caused falling from different heights, falling on the stairs.

4.2.Transport injury

General characteristics of contemporary transport injury and its types. The significance of forensic investigation in accidents. Car injury and its types. Train injury, its types, the nature of injuries. Motorcycle injury. Tractor injury. Forensic examination of injuries caused by water vehicles. Aviation injury and its types.

4.3. Damage from sharp objects

Definition and classification of sharp objects. Mechanisms of action of sharp objects. Types of injuries and their morphological characteristics. Differential diagnosis of wounds cased by sharp objects. Ways to establish the types of sharp objects and their mechanisms of action according to specific injury characteristics on the body and clothing of the victim.

4.4Gunshot injuries.

Firearm and its types. Shot mechanism and its complementary factors. Types of bullet action. Characteristics of gunshot injuries cased by shots from different distances. Diagnosis of the entry and exit gunshot wounds, determining the direction of the wound channel in the body. Injuries caused by a canister shot. Injuries caused by atypical, self-made and airguns. Establishment of the sequences of gunshot wounds, possibilities of gunshot wounds caused by victims themselves. Blast injury, its peculiarities and morphological characteristics.

5. Health disorder and death from acute oxygen starvation and exposure of external factors.

5.1. Mechanical asphyxia

The concept of hypoxia and mechanical asphyxia. Types of mechanical asphyxia. Stages of mechanical asphyxia. Strangulation asphyxia: hanging, strangling noose, strangling hands. Compressive asphyxia: compression of the chest and abdomen, especially tanatogenesis, morphological traits. Obstructive apnea: h holes and covering the nose and mouth, the airways foreign objects, with s puchimi bodies, gastric contents, blood. Drowning, its types, forensic diagnostics. Death in a confined space with a lack of oxygen.

5.2. Damages from the action of high and low temperatures. The damage from the actions of other physical factors

Damage from the action of high and low temperatures

Local and systemic effect of the heat. Burns. Burn disease. Outcomes of burns. Differential diagnosis of burns from the action of flame and hot liquid on the STI. The general effect of heat on the body. Heat and sunstroke, thanatogenesis, cell diagnostics. General and local effects of low temperature. Death by cooling the whole body and its signs on the body. Frostbite, their art e penalties, morphological characteristics.

The damage from the actions of other physical factors

Electrical accident. Mechanisms of action of the electric current to the body. Morphology of electrocution: elektrometki, electrical burns, mechanical damage. Lightning, thanatogenesis, cell diagnostics. Effect of increased and reduced pressure p on gas environment on the body. Effect of ionizing radiation on the river naturally. Acute and chronic radiation sickness, especially the study of the corpse. Local radiation defeat.

6. The forensic toxicology

The concept of the poison. A forensic classification of poisons. Poisoning and their origin. Forensic identification poisoning. The expert evalua s Tats forensic chemical analysis. Ethyl alcohol poisoning and alcohol-containing liquid. Methyl

alcohol poisoning. Food poisoning, classification, features forensic examination.

7. Forensic examination of a substance called proofs of biological origin

The concept of the physical evidence. Material evidence to be forensic examination. Classification of blood traces in the form and fur ism and their education. The principles and possibilities of examination of semen, saliva, hair and other biological e Sgiach objects. Medical and forensic research in forensic medicine.

8. Forensic examination of living persons

A. Forensic examination of victims, suspects, accused and other persons

Reasons for forensic examination of victims, suspects, defendants and others, its organization and conduct. Examination of determining the degree of cord injuries e STI. Legal classification of injuries by severity. Criteria serious, less serious and light damage.

B.Forensic examination of the disputed state of sexual and reproductive ability

Sex crimes. Features of expertise on gender and sexual offenses. Examination in cases of sexual assault, resolved issues. We take the examination to establish the n In particular, the former childbirth and abortion. Criminal abortion. Methods of examination in cases of rape.