

METHODICAL DEVELOPMENT PRACTICAL LESSON ON:
Topic №12 "The final module lesson"

Background:

The curriculum for the discipline provided that after the study subjects to conduct final training sessions with students learned the material. By learning block assigned topics on general issues of forensic examination, examination of living persons, forensic thanatology, forensic traumatology, which were included in the list of workshops and a number of topics which students taught themselves during extracurricular self-training.

The ultimate goals: to determine the level of students' knowledge of organizational and procedural foundations of forensic science, thanatology, examination of living persons and forensic traumatology.

Matireals:

1. The list of questions to determine the level of knowledge of students.
2. Situational tasks
3. Examples of the different types of injuries.
4. Blanks' medical certificate of death.

"LIST OF QUESTIONS TO TEST SESSION:

1. What is forensic medicine?
2. Forensic medical examination and its types. Duties, tasks and responsibilities of the forensic medical examiner.
3. Medico-legal systems in the world.
4. Structure of the medical services in Ukraine. Bureau of the forensic medical expertise, subsections.
5. Definition of the "thanatology". Cellular and somatic death.
6. Forensic medical examination of the dead body.
7. Death classification.
8. Pathophysiology of dying.
9. Forensic medical significance of the terminal stage of dying. Clinical and biological death.
10. Application of the organs and tissues for the corpses for transplantation. Legal, ethical and medical aspects of transplantation.
11. Diagnostic criteria for determination of the brain death.
12. Euthanasia.
13. Cause, mechanism and manner of death.
14. Plausible and absolute signs of death. Early changes after death.
15. Late changes after death. Natural conservation of the body.
16. How to "read" nomogram?
17. Forensic medical determination of the time of death. Supravital reaction.
18. Sudden death. Definition and signs.
19. Risk factors of sudden death.

20. Diagnostics of the death from cardiovascular disease.
 21. Diagnostics of the death from respiratory system disease.
 22. Diagnostics of the death from disease of the digestive system, central nervous system, the genitourinary system.
 23. Procedural position and organization of forensic autopsy.
 24. General rules, procedures and phases of the forensic autopsy.
 25. Forensic medical records, which is filled during and after the autopsy.
 26. Death certification.
 27. Examination of the death or crime scene.
 28. Duties of a specialist in forensic medicine at the examination of the corpse at the death or crime scene.
 29. The methods of determination of the time of death at the death or crime scene.
 30. Forensic medical capabilities of the identification an unknown person.
 31. The value of the dental status for the identification an unknown person.
 32. Bite marks.
 33. Identification by DNA profiling
 34. Examination of the dead body of the newborn.
 35. Medico-legal questions in case of the examination of the dead body of the newborn.
 36. What is infanticide? What are the risky factors of SIDS?
 37. Causes of death of the newborn.
 38. Forensic medical examination of the living persons.
 39. Forensic medical examination in case of the sexual assault.
 40. The concept of "injury." Classification of injuries, types of injuries.
- Questions that resolve with mechanical trauma. Mechanism of action of a blunt object on the human body.
41. Abrasion and contusion. Their forensic medical significance.
 42. Bone fractures. Their forensic medical significance.
 43. Fractures of the facial bones and injury of the teeth and oral mucus.
 44. Laceration. Characteristics, definition and signs.
 45. Self-inflicted injuries.
 46. Railway trauma.
 47. Transport trauma. Injures in case of road accident.
 48. Stab wounds. Self-inflicted injures.
 49. Chop and incised wounds. Differences. Dependence from manner of death .
 50. Questions what are resolved in case of stab, incised, chop wounds.
 51. The main causes of death in cases of mechanical trauma.

52. Classification of the firearm weapon.
53. Components of the ammunition, mechanism of the shot.
54. Gunshot residue.
55. Kinetic energy of the projectile.
56. Specifics of the contact wounds.
57. Specifics of the intermediate distance wounds.
58. Specifics of the distant wounds.
59. Exit gunshot wounds.
60. Specifics of the shotgun wounds. Structure of the shotgun cartridge.
61. Medico-legal aspects pregnancy and abortion.
62. Examination of the scene in case of criminal abortion.
63. Causes of death in case of criminal abortion.
64. Asphyxia. Definition and classification.
65. Signs of asphyxia.
66. Hanging and ligature asphyxia.
67. Manual asphyxia. Gaging. Smothering.
68. Drowning.
69. Poison. Definition. Ways of the poison entering in the body.
70. The toxic and fatal dose.
71. Tolerance and idiosyncrasy.
72. Corrosive poison. Poisoning of the acids and alkalines.
73. Forensic medical diagnosis of poisons that form methemoglobin.
74. Poisoning with carbon monoxide.
75. Poisoning with arsenic, thallium.
76. Poisoning with sleeping pills.
77. Poisoning with ethyl alcohol and its surrogates.
78. Poisoning with cyanide compounds.
79. Agrochemical poisons.
80. Strychnine poisoning, atropine.
81. Poisoning with drugs (morphine, heroin, opium, cocaine, narcotic mushrooms).
82. Rules of the removal of internal organs for forensic toxicological studies and evaluation of their results.
83. Local effects of the heat on the body. Features of burns caused by various factors. Scalding.
84. General effect of high temperatures, overheating and sunstroke.
85. The local effect of cold. The degree frostbites and their morphological characteristics.
86. General effect of low temperature. Signs of death from hypothermia.

87. Features of action of electricity on the human body.
88. Forensic examination of the lesions with technical electricity.
89. Electrical lesion.
90. Death from lightning.
91. Forensic medical examination of blood.
92. Forensic medical examination of saliva, urine, sperm.
93. Forensic medical examination of hair.

Skills to be checked in the control classes

1. To be able to describe dead body at the scene.
2. To be able to make "The forensic medical report."
3. To be able to determine the cause of death of the suddenly died person.
4. To be able to issue the "death certificate."
5. To be able to establish the fact and time of death using changes after death.
6. To be able to perform a forensic medical examination of the living person.
7. To be able to determine the severity of injury.
8. To be able to determine the type of injury and its main morphological features.

Elements of lesson subject to mandatory assessment:

1. Theoretical knowledge of students on issues included in the list.
2. The degree of mastery of practical skills.
3. Solving situational problems.

Basic books:

1. DiMaio V. Forensic Pathology, 2nd ed. / V. DiMaio, D. DiMaio // Practical aspects of criminal and forensic investigation, Boca Raton, London, New York, Washington, D.C.: CRC Press, 2001, p.562.
2. Richard Shepherd - Simpson's Forensic Medicine/Twelfth Edition Senior Lecturer in Forensic Medicine Forensic Medicine Unit St George's Medical and Dental School Tooting, London, UK, 2003, p. 198.
3. Longauer A., Bobrov N., Labaj P. Practicing in forensic medicine, Faculty of Medicine, P. J. Safarik University Kosice, Slovak Republic, 2000, p.98.
4. Eckert, William G. Introduction to forensic sciences. / William G. Eckert second editon. - New York: Elsevier, 1992. – P. 385
5. DiMaio V. J. M. Gunshot wounds. Practical aspects of firearms, ballistics, and forensic techniques. Second Edition / Vincent J. M. DiMaio. – CRS Press: New York, - 1999. – 400p.
6. Mykhailychenko B. V. Forensic medicine [Текст] : Textbook for students of medical universities with English language training / B. V. Mykhailychenko, A. M. Biliakov, I. G. Savka. – K. : AUS Medicine Publishing, 2017. – 224 p. – Approved MESU letter No1/11-11455, 6 December 2011.

Supplementary literature:

1. Color Atlas of Forensic Medicine and Pathology -Edited by Charles A. Catanese, USA, 2009, p. 424.;
2. Color Atlas of the autopsy / Scott A. – Wagner Boca Raton London New York Washington, 2004, p. 226.

Informational sources:

1. <https://www.4tests.com/usmle#StartExam>
2. <http://www.medicalstudent.com/>
3. http://www.thestudentroom.co.uk/wiki/Resources_for_Medical_Students
4. <https://quizlet.com>
5. <http://library.med.utah.edu/WebPath/webpath.html>
6. <http://www.webpathology.com/>
7. <https://www.geisingermedicallabs.com/lab/resources.shtml>
8. <http://www.umsa.edu.ua>
9. <http://ukrmed.org.ua>
10. <http://sudmed-p.ru>
11. <http://forens-med.ru>
12. Electronic library.