

## Theme 2

### ORGANIZATION AND CONDUCTION OF MEDICOLEGAL EXAMINATION OF DEAD BODY AND REGISTRATION OF DOCUMENTS

**Actuality of theme.** Medicolegal examination of dead body is one of the most important type of medicolegal examination. It is conducted by specialists – medicolegal experts. According to the legislation a doctor of any specialization may be enlisted as an expert, if there is no professional medicolegal expert. As a rule, it takes place in districts, where there is no district medicolegal examination, or due to circumstances a medicolegal expert can not discharge his duties.

#### **General purpose of training**

To be able to state the order of conduction, organization of medicolegal examination of dead body and to formulate a sectional diagnosis.

#### **Concrete aims. To know:**

- 1 To know judicial positions, common rules and order of medicolegal examination (research) of dead body.
- 2 To learn the features of methods and techniques of external and internal research during medicolegal examination of dead body in the process of their demonstration by a teacher.
- 3 To know the methods of extraction of parts of organs, tissues and liquids for additional laboratory researches.

#### **To be able:**

- 1 To be able to conduct the external examination of dead body.
- 2 To conduct the internal examination of dead body.
- 3 To be able to diagnose the pathomorphological changes.
- 4 To register «Act of medicolegal examination of dead body».
- 5 To be able to register the «Medical certificate about death» recognition features of medicolegal examination of dead body.
- 6 To formulate and to ground «Conclusions of expert».
- 7 To register «Conclusions of expert».

#### **Initial level of abilities and knowledge. To know:**

- 1 Definition of «medicolegal examination» and «medicolegal examination of dead bodies» («Order №6» of 17.01.1995).
- 2 Chart and content of «Act of medicolegal examination of dead body» (look addition).
- 3 Conditions and order of conduction of medicolegal examination of dead body («Order №6» of 17.01.1995).
- 4 List of basic medicolegal documents («Order№6» of 17.01.1995).
- 5 Definition of «Additional researches» and «Results of additional researches».
- 6 Principles and registring of content of conclusions in the act of autopsy.

#### **Basic literature**

1. Kontsevich I.O., Mikhailichenko B.V. Judicial medicine. - Kiev: Lesya, 1997. – P. 38–55.
2. Sapozhnikov J.S., Hamburg A.M. Judicial medicine. – Kiev: High school, 1976.–P. 58-64.
3. Sapozhnikov J.S., Hamburg A.M. Judicial medicine. – Kiev: High school, 1980.–P. 59-66.
4. Judicial medicine/By ed. in chief. Smolyaninov V.M.–Moscow: Meditsina,1975.–P.35-47.
5. Judicial medicine/By in chief. Smolyaninov V.M–Moscow: Meditsina,1982.–P. 348-357.

#### **Supplementary literature**

1. Medicolegal examination of a corpse / Gromov A.P., Kapustin A.V. - Moscow: Meditsina, 1991. - 320 p.
2. Judicial medicine. Textbook for higher educational establishments / By ed. in chief. Tomilin V.V. – Moscow, 1996. – 370 p.

### **Lecture on the following topic.**

#### **Content of the topic in graphological charts and tables.**

Every student gets protocol part of «Act of medicolegal examination of dead body», extract from the protocol review of dead body in place of his exposure and other materials of case. During their study one should be oriented on the questions, an answer on which he will have to illustrate in conclusions. Next students define the reason of death and make the act of research of dead body in a brief form, writing out the pathological changes and formulate a sectional diagnosis.

#### **Theoretical questions to the training, on the basis of which the fulfillment of work, having special purpose, is possible**

- 1 To explain basic rules, conditions and features of medicolegal examination of dead bodies.
- 2 To encounter the occasions of setting medicolegal autopsy.
- 3 To name parts and their content of act of dead body examination.
- 4 To analyze the technique of medicolegal autopsy.
- 5 To give comparative description of pathoanatomical and medicolegal examination of dead body.

#### **Short methodical instructions to work on practical training**

At the beginning of training the home tasks will be checked. Training is conducted as conversation with demonstration of tables and proper documents of medicolegal examination of dead body. Teacher acquaint students with previous information, content of resolutions, consideration of investigator on the conduction of medicolegal autopsy, names questions, on which answers should be given. The introductory part of «Act» is registered.

A teacher shows a technique and order of medicolegal examination of dead body. The external review of dead body is conducted, during which his features are stressed. Then internal examination is conducted, 2-3 students help a teacher. At the end of section a teacher summarizes the found changes in a dead body, acquaint with the rules of organs and tissues extraction for laboratory analysis.

Students independently give answers to the questions which were stressed at the beginning of research in the introductory part of «Act», set a sectional diagnosis and fill in the medical certificate about death.

Training is completed by the analysis of the results of the independent work of every student which must be able to give right answer to the theoretical question and task. The final level of theoretical knowledge will be cleared up by the standardized test control.

#### **Situational tasks**

##### **Task 1**

Mr. Kozak A.A., 50 years old, in the morning was found dead in a bed. According to the words of his wife, the man the day before had troubles at work. By medicolegal expert in the act no signs of violent death were found. During the autopsy sharply marked, full, intensive death spots; face is pale, acute plethora of inner organs, liquid state of blood, points of crimson hemorrhages, in epicardium and under pleura, nidus crimson hemorrhages on the front wall of left ventricle, 1x1,5 cm in size, uneven blood filling of heart muscles of heart, atherosclerotic plaques, in the midwall of coronal vessels (on 2/3 broke the road clearance of

vessels), aorta, vessels of brain basis, edema of cerebrum, cystic disease of the right kidney. Other pathological changes are not found.

Set a sectional diagnosis.

### **Task 2**

From the consideration of investigator it is known, that Mrs. Hnuda V.A., 75 years old, suddenly died at home. During the autopsy continuous blue-purple death spots, right-side groin hernia, hydropericardium, increase of the heart (15,6x16x5,5 cm), cardiac muscle is flabby, with whitish layers, there is considerable deformation of bivalve valve, hardening, which in some places is stony, atherosclerotic plaques in a midwall aortas, cyst of the left kidney, cyst of the right ovary.

Set a sectional diagnosis.

### **Examples of the standardized test control**

To choose one right answer

*1 What document does a medicolegal expert register after finishing medicolegal research of dead body:*

*2 What document does a medicolegal expert register after examination of dead body and getting additional information of laboratory analysis:*

*3 How many generally accepted parts make up the “Medicolegal diagnosis”:*

*4 How many generally accepted parts make up the “Medical certificate about death”:*

*5 What does expert specifies in the first point (a) of “Medical certificate about death”:*

*6 What does expert specifies in the second point (b) of “Medical certificate about death”:*

*7 What does expert specifies in the first point (a) of the “Medicolegal diagnosis”:*

*8 What does expert specifies in the second point (b) of the “Medicolegal diagnosis”:*

*9 What does expert specifies in the third point (c) of the “Medicolegal diagnosis”:*

*10 What part does not make up “Conclusion of expert”:*

### **Addition. Table of contents of theme in charts**

#### **Example of the resolution about the setting of medicolegal examination**

1.01.2006 Senior investigator of public office of prosecutor in Poltava (Name, Patronymic Name, Surname) after examining materials of criminal case №...

#### **Set**

On December, 31, 2005 about 7 o'clock 30 minutes in the open room under the external staircase of swimming pool «...» on ... Street, 1 in Poltava the dead body of Mr... (Name, Patronymic Name, Surname) was found in Poltava with numerous injuries in the area of head and neck.

On the basis of foregoing, considering, that for answering the questions which arose up, necessary special knowledge in the branch of judicial medicine, following the article of... criminal-legal code of Ukraine

#### **I decree**

To appoint in this criminal case medicolegal examination, the conduction of which charge to the experts of the Poltava regional bureau of medicolegal examination.

For the decision by experts put such questions:

- 1 What physical injuries are there on the dead body of Mr...? (Name, Patronymic Name, Surname), their localization, time of formation, and also degree of physical injuries, from them relatively to the living person?
- 2 What mechanism of formation of present physical injuries?
- 3 What is the direct reason of death of victim?
- 4 What is the time of death?
- 5 What from physical injuries present on a corpse were caused during lifetime, and which of them have posthumous character?
- 6 What is the description of injuring object (objects) from the action of which physical injuries appeared on a corpse?
- 7 From the action of one or different objects did these physical injuries appear?
- 8 From which by force and in what order physical injuries present on a dead body were caused to the victim?
- 9 Did a victim take alcoholic drinks before death and if so, what state of alcoholic intoxication he was in relatively to the living person?

During the research of dead body to take: pieces of skin with the damages, samples of hair from five areas of head, standards of blood on group belonging, samples of urine and blood on the presence of alcohol, cut the nail plates from both hands, and also other objects which are necessary for objective illumination of the put questions.

To give to the disposal of experts copy of the necessary resolution. Dead body of Mr... (Name, Patronymic Name, Surname) in a medicolegal morgue was delivered according to the direction of the senior investigator of public office of prosecutor of Poltava (Name, Patronymic Name, Surname).

Copy of this decision was directed to the public prosecutor of Poltava.

### **Example of act about death verification**

City of N., May, 29, 2005, 5 hours 30 minutes. We, that signed below: Medicolegal expert of city N. doctor (Name, Patronymic Name, Surname), duty doctor of the ambulance station, doctor (Name, Patronymic Name, Surname) and junior intern of N. Military Hospital captain of medical service (Name, Patronymic Name, Surname), on suggestion and in the presence of investigator of N. public city office of prosecutor of adviser justices (Name, Patronymic Name, Surname) and witness (Name, Patronymic Name, Surname) and (Name, Patronymic Name, Surname) which live: 1) on a Hriboedov Street №00 and 2) on a Nahorny Street №00, in the building of morgue of N. city Medicolegal examination which is situated on D... Street №00 medicolegal research of dead body of Mr... (Name, Patronymic Name, Surname), 41 years old was conducted. The dead body was delivered by order of above-mentioned investigator for the purpose of death fact establishment and possibility of its autopsy before the expiration of 12-hours term from a moment of death, set by law. From above-mentioned report of investigator it is evident, that death of Mr... (Name, Patronymic Name, Surname) happened 2 hours earlier - on May, 29, 2005 at 3 o'clock 30 minutes. The autopsy of his body before the end of the noted term is necessary for extraction of a bullet, which is in the corpse.

While the research it was found that: dead body, in the places covered by clothes, keeps the lifetime warmth of body, cadaveric rigidity and death spots were not found. While stethoscope listening in the region of heart signs of heart beating are not heard. Burning hot on the flame of spirit burner copper wire was put to the skin on the front surface of right hip - in place of burn brown scab appeared, but, round the scab during 20 minutes no signs of lifetime reaction were

not marked. During the conduction on this place of a few cuts of skin to the subcutaneous allulose bleeding was not marked.

Medicolegal expert

Investigator, adviser of justice

Witness

### **Conclusion**

On the basis of above-mentioned facts we consider that the conducted researches confirmed the fact of death of Mr... (Name, Patronymic Name, Surname), and there are no obstacles for implementation of immediate medicolegal autopsy of his corpse.

A medicolegal expert, doctor

Doctor

Addition  
ACT  
medicolegal research of dead body  
№ \_\_\_\_\_

« \_\_\_\_ » \_\_\_\_\_ 200 \_\_\_\_\_ year from \_\_\_\_\_ till \_\_\_\_\_  
hours with \_\_\_\_\_ weather and \_\_\_\_\_ illumination, on the  
basis of \_\_\_\_\_  
from « \_\_\_\_ » \_\_\_\_\_ 200 \_\_\_\_\_ year № \_\_\_\_\_  
in the building of \_\_\_\_\_  
medicolegal expert conducted medicolegal examination of dead body \_\_\_\_\_  
\_\_\_\_\_ year of birth 19 \_\_\_\_ ( ) years old, which lived after the address \_\_\_\_\_  
During the examination were present \_\_\_\_\_

**Case circumstances**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**External research**

Clothes on the dead body \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

A dead body was delivered without clothes.

Dead body, sex \_\_\_\_\_ years old (visually and according documents),  
length of body \_\_\_\_\_ cm, body type \_\_\_\_\_. Fatness \_\_\_\_\_  
signs in cases of autopsy of unidentified person are filled on in the columns about  
unidentified dead body \_\_\_\_\_  
of a cadaveric rigidity \_\_\_\_\_

Coverlet in general \_\_\_\_\_

Death spots of \_\_\_\_\_ colour, are found on \_\_\_\_\_

While pressing \_\_\_\_\_

Putrid changes \_\_\_\_\_

Hair on the head \_\_\_\_\_

On hairy part of head during a examination and palpation \_\_\_\_\_

Skin of the face \_\_\_\_\_

Eyes \_\_\_\_\_, corneas \_\_\_\_\_

pupils \_\_\_\_\_

connective membranes of eyes \_\_\_\_\_

Bones and cartilages of nose by touch \_\_\_\_\_

Openings of nose \_\_\_\_\_

Acoustic ducts \_\_\_\_\_, mucous tunic of lips \_\_\_\_\_,

tongue \_\_\_\_\_, teeth \_\_\_\_\_

On the neck \_\_\_\_\_

Thorax \_\_\_\_\_

Stomach \_\_\_\_\_

External genitals \_\_\_\_\_  
Anus \_\_\_\_\_  
Extremities \_\_\_\_\_  
Injuries \_\_\_\_\_  
Any other injuries and peculiar features during the external research of dead body were not found.

### Internal research

While section of abdominal cavity \_\_\_\_\_  
Hypodermic cellular tissue reaches in the area of chest \_\_\_ cm, in the area of stomach \_\_\_ cm.  
Epiploon \_\_\_\_\_. The localization of abdominal cavity organs \_\_\_\_\_.  
Stomach \_\_\_\_\_, intestine loops \_\_\_\_\_. Peritoneum \_\_\_\_\_  
In the abdominal cavity \_\_\_\_\_  
Diaphragm cupola is situated on the right on the level \_\_\_\_\_  
on the left \_\_\_\_\_ ribs. Rib cartilage are cut \_\_\_\_\_  
Thorax bone \_\_\_\_\_  
While thorax autopsy lungs \_\_\_\_\_  
In pleural cavities \_\_\_\_\_  
Pericardium \_\_\_\_\_,  
in its cavity there is \_\_\_\_\_  
From the cavity of heart and large vessels is excreting \_\_\_\_\_ Heart is \_\_\_\_\_ shaped,  
in sizes \_\_\_\_\_ cm, its weight is \_\_\_ g. Epicardium contains \_\_\_\_\_,  
heart surface is \_\_\_\_\_  
Right vein opening in diameter is \_\_\_\_\_ cm, left is \_\_\_\_\_ cm.  
In heart cavities there is \_\_\_\_\_ Heart muscle on the sections is of \_\_\_\_\_  
consistence \_\_\_\_\_. Thickness of the muscle of left ventricle is \_\_\_\_\_ cm, right is \_\_\_\_\_ cm.  
Three-leaved valve \_\_\_\_\_  
Two-leaved valve \_\_\_\_\_  
Inner heart membrane is \_\_\_\_\_  
Aorta width on the cut above the valves is \_\_\_\_\_ cm.  
Its valves are \_\_\_\_\_  
Inner surface of aorta is \_\_\_\_\_  
Width of lung artery on the section above the valves is \_\_\_\_\_ cm.  
Its valves are \_\_\_\_\_  
Inner tunic of lung artery is \_\_\_\_\_  
Coronal artery of heart is \_\_\_\_\_  
In the hypodermic cellular tissue of the neck it was found \_\_\_\_\_  
Larynx cartilages \_\_\_\_\_, sublingual bone \_\_\_\_\_  
Thyroid gland is \_\_\_\_\_  
The tongue is \_\_\_\_\_  
Tonsils are \_\_\_\_\_  
Gullet and esophagus are \_\_\_\_\_  
Larynx and trachea are \_\_\_\_\_  
Lungs by touch are \_\_\_\_\_  
On the surface of lungs there is \_\_\_\_\_  
Tissue on the cut is \_\_\_\_\_  
While ribs examination from the side of thorax \_\_\_\_\_

Collar bone is \_\_\_\_\_ . Shoulder blades are \_\_\_\_\_  
 Vertebras \_\_\_\_\_ Spleen is \_\_\_\_\_ cm in size.  
 Its capsule is \_\_\_\_\_, spleen consistence is \_\_\_\_\_, tissue on the cut is \_\_\_\_\_  
 Gall bladder is \_\_\_\_\_,  
 in its cavity there is \_\_\_\_\_, mucous tunic is \_\_\_\_\_  
 In the stomach cavity there is \_\_\_\_\_, the smell \_\_\_\_\_.  
 Stomach mucous tunic is \_\_\_\_\_ Pancreas is \_\_\_\_\_ cm in size.  
 In intestine \_\_\_\_\_ Its mucous tunic is \_\_\_\_\_.  
 Kidneys are \_\_\_\_\_ cm in size. Adipose capsule is \_\_\_\_\_  
 Fibrous capsule can be taken away \_\_\_\_\_. Kidney surface is \_\_\_\_\_  
 On the section tissue is \_\_\_\_\_ Border between layers is \_\_\_\_\_  
 Kidney pelvises are \_\_\_\_\_  
 Adrenal glands are \_\_\_\_\_ Bladder is \_\_\_\_\_  
 Its mucous tunic is \_\_\_\_\_  
 Inner genitals are \_\_\_\_\_  
 Pelvis bones are \_\_\_\_\_ Soft head covers from their inner surface are \_\_\_\_\_  
 Bones of calvarium are \_\_\_\_\_, their thickness is \_\_\_\_\_  
 Hard cerebrum tunic is \_\_\_\_\_ with bones of calvarium is \_\_\_\_\_ adnated.  
 In the upper linear sinus and sinus of skull basis \_\_\_\_\_  
 Soft cerebrum tissue is \_\_\_\_\_ Its vessels are \_\_\_\_\_  
 Vessels of cerebrum basis are \_\_\_\_\_  
 Gyri are \_\_\_\_\_  
 Fissures between them are \_\_\_\_\_  
 Cerebrum tissue on the cut is \_\_\_\_\_  
 From the cerebrum tissue \_\_\_\_\_ there is a smell of \_\_\_\_\_  
 In the cerebrum ventricles \_\_\_\_\_  
 Cerebellum and medulla oblongata tissues \_\_\_\_\_  
 Bones of skull basis are \_\_\_\_\_  
 It is sent to the additional laboratory researches: \_\_\_\_\_  
 Medicolegal diagnosis \_\_\_\_\_  
 Basic disease (injury, state) \_\_\_\_\_  
 Complications \_\_\_\_\_  
 Concomitant (diseases, injuries, alcoholic intoxication) \_\_\_\_\_

### Expert conclusions

On the basis of the medicolegal examination of the corpse \_\_\_\_\_ 19\_\_ year of birth,  
 data of laboratory additional researches, medical documents with taking into account case  
 circumstances and according to the set question, come up to such conclusions:

\_\_\_\_\_  
 Medicolegal expert \_\_\_\_\_ (signature)