

**Ministry of Health of Ukraine
National Medical University Named after O.O. Bohomolets
Department of Forensic Medicine and Medical Law**

N.M. ERHARD

Forensic Examination of a Gunshot Wound

Methodologic materials



Educational edition

ERHARD Natalia Mykolaivna

**Ministry of Health of Ukraine
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Адреса редакції та п/п: інформаційно-видавничий відділ УкрДГРІ
04114, м. Київ-114, вул. Автозаводська, 78
Тел.: 206-35-18; тел./факс: 430-41-76
E-mail: mru@ukrdgri.gov.ua

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These methodologic materials contain tasks for a practical class in English, based on a competent approach with students of higher medical and justice education institutions with III-IV level of accreditation.

These methodologic recommendations can be of use for medical workers, employees of all entities of Ministry of Internal Affairs, students, interns, teaching professors of higher medical and justice educational institutions.

List of literature

1. Наказ Ректора НМУ імені О.О. Богомольця Амосової К.М. № 14 від 17.01.2018 року «Про заходи з удосконалення підготовки та проведення лекцій в Університеті».
2. Михайличенко Б.В. Судова медицина / Б.В.Михайличенко - К.: ВСВ «Медицина», 2011. – 447 с.
3. Михайличенко Б.В. Судово-медична експертиза механічної асфіксії / Б.В. Михайличенко, Н.М.Ергард – К.: УкрДГРІ, 2017. – 16 с.
4. Михайличенко Б.В. Судово-медичне зажиттєвої реакції організму при механічній асфіксії через підвищення за змінами площі деліпідизації кори надниркових залоз / Б.В. Михайличенко, А.М.Біляков, Н.М.Ергард – К.: УкрДГРІ, 2017. – 12 с.
5. Наказ Міністерства охорони здоров'я України № 6 від 17.01.1995 року «Про розвиток та вдосконалення судово-медичної служби України».
6. Громов А.П. Курс лекцій по судовій медицині / А.П. Громов. – М.: Медицина, 1979. – 48 с.
7. Тагаев Н.Н. Судебная медицина. Учебник для слушателей вузов МВД Украины / Н.Н. Тагаев. – Х.: Факт, 2003.
8. Михайличенко Б.В. Огляд трупа на місці його виявлення / Б.В. Михайличенко, Н.М. Ергард – К.: УкрДГРІ, 2017. – 24 с.
9. Михайличенко Б.В. Судово-медичне визначення ступеня тяжкості тілесних ушкоджень потерпілих, звинувачених та інших осіб / Б.В. Михайличенко, Н.М. Ергард. – К.: УкрДГРІ, 2017. – 24 с.
10. Кримінальний Кодекс України від 05.04.2001 № 2341-III: [Електронний ресурс]. – Режим доступу: <http://zakon5.rada.gov.ua/laws/show/2341-14>
11. Медичне право України: Збірник нормативно-правових актів. – К.: ІнЮре, 2001.
12. Ергард Н.М. Сучасна лекція / Н.М. Ергард – К.: УкрДГРІ, 2018. – 24 с.

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Hemodynamic action of a bullet



Slide 13

Determination of the sequence of gunshot wounds

Rule of Savigny-Nekiforov



Slide 14

Foreword

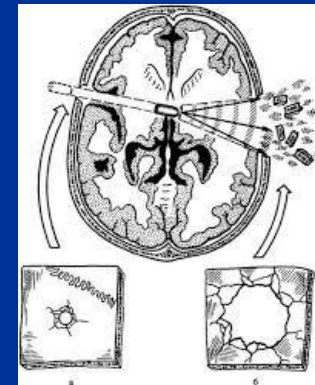
Every year there is an increase in number of criminal offence against human life and health which is caused in an increase of crime rates in Ukraine. Worsening of criminogenic environment in Ukraine demands to use all the power of its legislation in the fight against crime.

A big toll in this process not only lays on law enforcement agencies but also on forensic experts. A number of forensic investigation conducted increases each year and core factors that stimulate it are: legislative awareness of population and active layers community.

As a result of a forensic examination issues like presence of physical injury, their location, mechanism and type of injury, severity and time of onset to be resolved, as well as to state the cause of death etc.

In these methodologic materials tasks are presented that are prepared for a specific module topic of “Forensic medicine” to be solved by students of higher medical and justice educational institutions of III-IV level of accreditation.

Lesions created on a flat bone



Slide 11

Entrance and Exit wound on skull bones (Flat Bones)



Slide 12

Lesions appearing on an Entrance Wound form a Intermediate-range shot



Slide 9

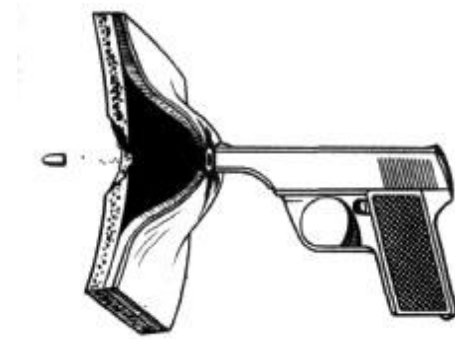
Lesions appearing on an Entrance and Exit wound



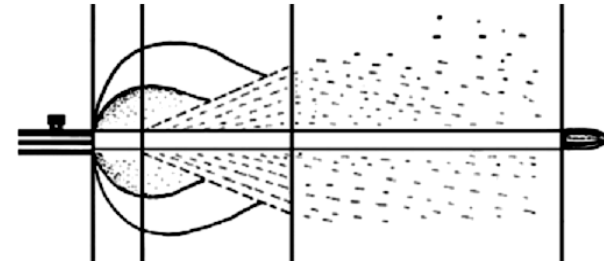
Slide 10

I. Forensic Examination of a Gunshot Wound

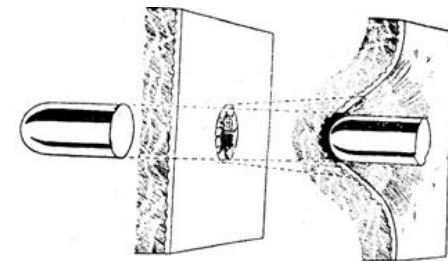
Task № 1. Based on pics. presented describe signs of a contact shot:



Task № 2. Based on pics. presented describe signs of a near-contact wound:



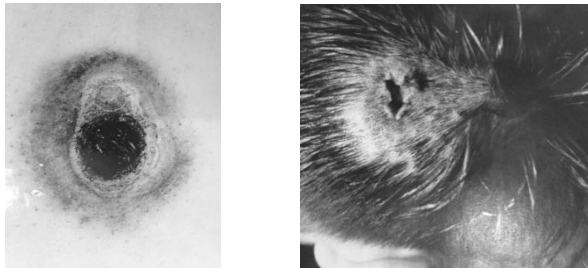
Task № 3. Based on pics. presented describe signs of an intermediate-range shot:



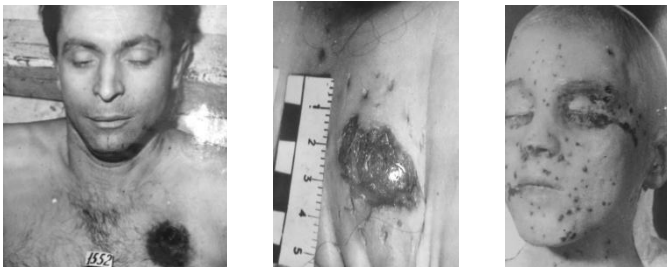
Task № 4. Based on pics. presented define the proximity of a shot:



Task № 5. Based on pics. presented, describe an Entrance and Exit wound:



Task № 6. Based on pics. provided define the proximity of each gunshot wound from a hunting rifle:



Task № 7. List laboratory methods used for gunshot wound inspection:

1. _____
2. _____
3. _____

Lesions appearing on an entrance wound form a near-contact shot

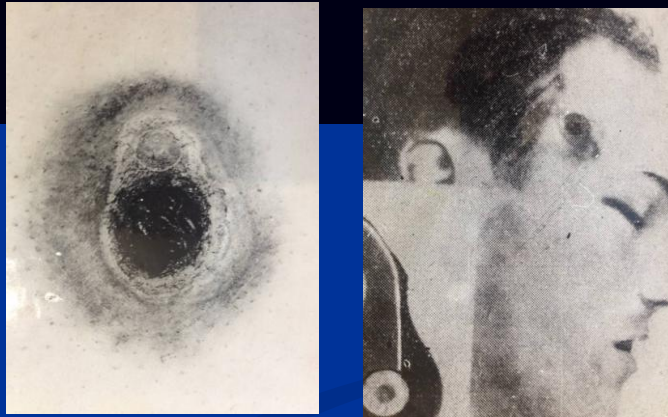
Slide 7

1.3. intermediate-range shot

- Presence of dust tattooing around the entrance wound
- Absence of additional signs of a shot around entrance wound and inside the wound tract

Slide 8

LESIONS APPEARING ON AN ENTRANCE WOUND IN CONTACT WOUNDS

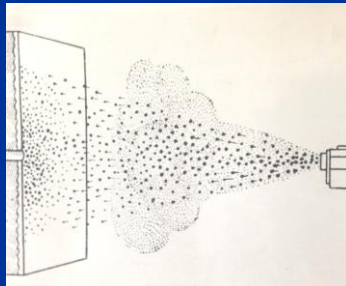


Slide 5

1.2. Near-contact shot

-Presence of additional signs of a shot around an entrance wound

- Location of additional signs of a gunshot alongside the wound tract



Slide 6

Task № 8. List questions solved by forensics during examination of physical harm caused by guns:

1. _____
2. _____
3. _____
4. _____
5. _____

Task № 9. Describe Savigny-Nekiforov sign:

1. _____
2. _____
3. _____
4. _____

Task № 10. List causes of death (and why did they happened) caused by guns:

1. _____
2. _____
3. _____
4. _____
5. _____

Task № 11. Name damage characteristics of bullet hydrodynamic activity:

1. _____
2. _____
3. _____

II. Example of a PowerPoint presentation for the class

National medical university named after O.O. Bohomolets
Department of Forensic Medicine and Medical Law

**FORENSIC EXAMINATION
OF A GUNSHOT WOUND**

Assistant professor of Forensic
Medicine and Medical Law
Department, MD, PhD
Erhard Natalia Mykolayivna

Slide 1

**Lesson's plan
(core objectives):**

I. Gunshot Wound

II. Types of Mechanical Asphyxia

Slide 2

I. Gunshot Wound

Shooting distance

1.1. Contact wound

1.2. Near-contact wound

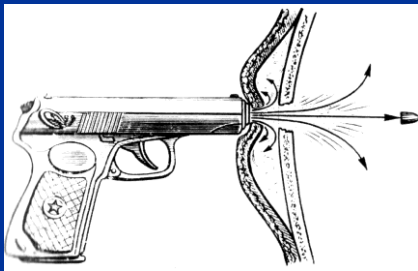
1.3. Intermediate-range shot

Slide 3

1.1. Contact wound

-Presence of a muzzle
imprint around
entrance wound

-Location of
additional signs
of a gunshot alongside
the wound tract



Slide 4