

TASK 1

At medico-legal autopsy of G., aged 49, the following injuries are revealed: on the anterior surface of the left femur in its medial third at a height of 72 cm above the feet there is an abrasion of an irregularly rounded form, 5 x 7 cm in size covered with crust, which is located above the uninjured skin with desquamation along the abrasion periphery. On the right knee, there is a rounded bruise, 4x3 cm in size, of greenish-yellow colour along the periphery.

Establish the prescription of injuries.

TASK 2

At medico-legal autopsy of S., aged 28, on the head, in its parietal area on the left, a wound is revealed, its centre is an injury of the head soft tissues of an irregularly rounded form, 1 x 0.5 cm in size, with crushed uneven edges impregnated with blood. Along the periphery of this injury, there is a graze wound up to 1.5 cm in diameter, of dark brown colour. Five lacerations of the skin, from 2 up to 4 cm in length, with uneven serrulated edges, are spread from the central injury, at their ends there are tissue intersections. In the depth of the wound, the impression of bones is felt at palpation.

Establish the type of the wound and the object it is inflicted by.

TASK 3

At medico-legal autopsy of S., aged 56, fractures of the 4th to 7th ribs are revealed. The fractures are located on the left side of the thoracic cavity relative to the anterior axillary line, with massive haemorrhages in the surrounding tissues. At detailed examination of the fractures, it has revealed that the external bone lamella of each of the injured ribs has largely ragged edges, which are irregular with serration of the bone tissue. The internal bone lamella has serrulated and even edges. Establish the mechanism of the fracture of the ribs.

TASK 4

In the left parietooccipital area of head there is a transversely located wound with regular non-grazed edges, with sharp ends 5.6 cm long.

Is it possible to establish the character of the trauma instrument and the type of the wound basing on this description?

TASK 5

In the area of the neck of the corpse, there is a wound with intersection of large vessels, trachea and oesophagus. In the respiratory tracts and large bronchi, there is liquid blood and its clots. The lung tissue on section is of a motley pattern due to presence of dark red spots alternating with lighter sites. The internal organs are moderately plethoric.

Establish the cause of death.

TASK 6

On the anterior surface of the chest to the right, there is a spindle-shaped wound, 1.9 x 0.9 cm in size, with regular non-grazed edges; one end is sharp, the other is fl-like, 0.3 cm wide. At approximation of the wound edges, it acquires a linear form; its length is 2.1 cm. The length of the wound canal in the soft tissues of the chest and the right lung is 5 cm.

What features of a stab-cutting instrument can be identified, and according to what signs of the described wound?

TASK 7

At medico-legal autopsy, in the area of the right frontal tuber, a damage of the skin penetrating to the bone is revealed. The damage is obliquely transversal, has a spindle-shaped form, on approximation of the edges it is linear; its length is 4.8 cm; the edges are slightly wavy, the ends are sharp with isolated tissue intersections in the depth. The skin around the damage at a depth of up to 2 cm from the edges is deprived of epidermis, dried, brown-red.

Establish the type of the wound and the object it was inflicted by.

TASK 8

On medico-legal autopsy, in the right parietal area of a pillar part of the head, an injury of the skin penetrating all its layers is revealed, 6.5 cm in length, arch-like and directed from the top downwards. The edges of the injury are largely wavy, not impregnated with blood; the ends are sharp without tissue intersections in the depth. The hair on the injury edges keeps, epidermis is not disturbed. The injury is slightly gaping, from its middle part an acute angle of a broken bone comes forward at a height up to 0.5 cm.

Establish the type of the wound and object it was inflicted by.

TASK 9

At medico-legal autopsy, on the back to the right of the scapular line, at the level of the third intercostal space a wound of a spindle-shaped form is revealed, 1.5 x 0.5 cm in size, with acute ends and dried regular edges. The wound canal passes from back forwards through soft tissues, injuring the right scapula, through the intercostal muscle of the third intercostal space it penetrates into the right pleural cavity and the tissue of the right lung, where terminates blindly. The total length of the wound canal is 8.7 cm; it is filled with blood clots.

Establish the type of the wound and the object it was inflicted by.

TASK 10

At medico-legal autopsy, a spindle-shaped wound is revealed on the chest to the right along the midclavicular line at the level of the rib arch, in a transversal direction from the front backwards, penetrating into the abdominal cavity with damage of the liver. On the skin, the wound at approximation of the edges is linear; its length is 3.7 cm. The wound edges are regular, the left end is slightly rounded, and the right one is acute. The total length of the wound canal is about 7.2 cm; in the liver tissue on cross sections, the left end of the wound has a fl-like shape.

Identify the type of the wound and the object it was inflicted by.

TASK 11

At medico-legal autopsy, in the parietal area of the head along the medial line, from the top downwards, a wound is revealed penetrating into the skull cavity. The skin injury has a form of an elongated triangle, the upper end is acute, the bottom end is n-shaped, and the edges are even. The length of the wound is 7.5 cm, the width at the bottom end is 0.8 cm. In correspondence with the wound in the parietal bone there is a defect in a form of an elongated triangle with relatively even edges 5.7 cm long and 0.9 cm wide at the lower end. Further, the wound through membranes damages the brain tissue at depth up to 2.8 cm.

Establish the type of the wound and the object it was inflicted by.

TASK 12

At medico-legal autopsy, almost a complete amputation of the left upper extremity is revealed at the level of the lower third of the shoulder retaining the connection with the rest part of the shoulder by a dermal flap on its internal surface. The amputation is transversal with damage of the skin, muscular tissue, nerves, vessels, humeral bone, it locates in one plane and has well defined arcuate eminences and furrows on the surface of dissection. The skin edges on the dissection line have small flaps.

Establish the type of the wound and the object it was inflicted by.

TASK 13

At medico-legal autopsy, in the left parietofrontal area, a wound of an irregular form is revealed, 4 x 4 cm in size, with irregular, gazed edges, impregnated with blood; in the depth and on the edges of the wound there are tissue intersections. The bottom of the wound is a comminuted fracture of the parietal bone of an irregular form, 3 x 2 cm in size. The splinters of the internal lamella are displaced 0.5-0.7 cm deep into the skull, with damage of the dura mater and medullary substance, where a contusion is observed on the area of 3 x 3 cm in size with crushing of the cortex and white substance up to 1-2 cm deep. Around the contusion centre, there is a diffuse subarachnoidal haemorrhage up to 1-1.5 cm wide.

Establish the type of the wound and the object it was inflicted by.

TASK 14

At medico-legal autopsy, a wound is revealed on the posterior surface of the right ulnar joint of an elongated form, 3 x 0.5 cm in size. The wound edges are irregular, bruised, grazed. The graze wound has an intermittent character, its width changes within the limits of 0.2-0.3 cm. The walls of the wound are vertical. In the subcutaneous fat there are dark red haemorrhages of an oval form 5 x 6 cm in size. The bottom of the wound is an uninjured bone. At the ends of the wound, there are connective tissue intersections. The skin around the wound is stained with dry grey mud.

Establish the type of the wound and the object it was inflicted by.

TASK 15

At medico-legal autopsy, an incomplete transversal fracture of the 4th rib to the right of the midclavicular line is revealed. The fracture line on the external bone lamella is upright a little oblique from the top downwards, from the right to the left; on the internal bone lamella it is not seen. The edges of the fracture on the external bone lamella are relatively even, well defined, the fracture planes are vertical. On the internal bone lamella there is a deformation of the compact lamella in a form of a "puff-up" located upright on the top of elevation there are multiple transversal cracks up to 0.3 cm long. On the upper edge and the lower one of the rib from the fracture on the external bone lamella linear cracks spread in a V-like pattern, extending along the longitudinal axis of the rib and terminating blindly at a distance of 1-1.5 cm.

Establish the mechanism of a rib fracture formation.