Ministry of Health of Ukraine Ukrainian Medical Stomatological Academy

APPROVED at a meeting of the department disaster medicine and military medicine «____» ____2020 protocol № 2 from 28.08.2020

Basser

Head of Department

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Methodical instructions for independent work of students during preparation for a practical (seminar) lesson and in class

Academic discipline	Training of reserve officers
Module № 1	Pre medical care in extreme situations
Topic of the lesson	Home care for the most common emergencies
Course	2
Faculty	foreign students training specialty "Medicine", "Stomatology"

1. TOPIC 9. DOMESTIC CARE FOR THE MOST COMMON EMERGENCIES

Actuality of theme:

The rate of development and specificity of the clinical picture of pain are determined by the duration of exposure to the traumatic agent, the level and extent of involvement in pain transmission of various somatic (and / or visceral) structures, constitutional features, differences in appropriate motor behavior (styles of emotional and physiological stress). Different patients experience pain caused by the same injuries in different ways. These differences are partly the result of genetic differences between people, but can also be explained by psychophysiological modulating factors.

Specific goals:

• know the causes, diagnosis and algorithm of first aid for fainting,

• know the causes, diagnosis and algorithm of first aid for coma of unknown etiology,

• know the causes, diagnosis and algorithm of first aid for convulsions,

• know the causes, diagnosis and first aid algorithm for heart pain (angina, heart attack),

• know the causes, diagnosis and algorithm of first aid for stroke

• know the causes, diagnosis and algorithm of first aid for acute abdominal pain,

• know the causes, diagnosis and algorithm of first aid for poisoning by an unknown substance,

• know the causes, diagnosis and algorithm of first aid with unknown gas,

• know the causes, diagnosis and algorithm of first aid for insect bites,

• know the causes, diagnosis and algorithm of first aid for dogs,

• know the causes, diagnosis and first aid algorithm for venomous snakes;

• algorithm of first aid for drowning,

• algorithm of first aid in case of electric shock, lightning.

Competences and learning outcomes, the formation of which is facilitated by the discipline (the relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

According to the requirements of the standard, the discipline provides students with the acquisition of competencies:

-integral: The ability to solve typical and complex specialized problems and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements. The ability of the individual to organize an integrated humanitarian educational space, the formation of a single image of culture or a holistic picture of the world.

-general: The ability to apply knowledge in practical situations. Ability to exercise self-regulation, lead a healthy lifestyle, ability to adapt and act in a new situation. Ability to choose a communication strategy; ability to work in a team; interpersonal skills. Ability to abstract thinking, analysis and synthesis, the ability to

learn and be modernly trained. Definiteness and perseverance in terms of tasks and responsibilities.

-special (professional, subject): Ability to carry out medical and evacuation measures. Ability to determine the tactics of emergency medical care. Emergency care skills. Skills to perform medical manipulations.

Basic knowledge, skills, abilities necessary for studying the topic (interdisciplinary integration):

Names of previous disciplines	Acquired skills
1. Human anatomy	Anatomy of the head and neck, anatomy of the chest, abdomen, pelvis and limbs. Anatomy of the vascular system.
2. Normal physiology	Physiological bases of respiratory system functioning.

Tasks for independent work in preparation for class and in class:

- providing home care in case of electric shock, lightning, drowning.

- providing home care for drowsiness, coma of unknown etiology, convulsions, heart pain, abdominal pain, poisoning by an unknown substance, unknown gas, insect bites, dogs, poisonous snakes.

The list of the basic terms, parameters, characteristics which the student should master at preparation for employment:

Term	Definition
Fainting or syncope (fainting)	sudden short-term loss of
	consciousness and muscle tone due
	to transient hypoperfusion of the
	brain.
	the highest degree of pathological
	CNS depression, which is
Coma	characterized by complete loss of
	consciousness, suppression of
	reflexes in response to external
	stimuli and dysregulation of vital
	functions of the body.
	involuntary contraction of skeletal or
	smooth muscle of varying intensity,
	duration and prevalence, having the
	nature of seizures.
Cramps	subjective phenomenon, so it is

	difficult to objectively assess.
	a symptom of a large number of
	diseases, which has a wide range of
Pain	clinical significance: from functional
	disorders to life-threatening
Abdominal pain	conditions.
	it is a pathological condition that
	develops as a result of the interaction
	of a living organism and substances
	of different origins that enter the
Poisoning	body from the environment
Torsonnig	body nom the environment.
	injuries that occur in the victim as a
	result of exposure to a high current
	(over 50 V) or a discharge of
	atmospheric electricity (lightning)
Electric injuries	autospheric electricity (lightillig),
Lieune injunes	Causing functional disorders of the
	CNS, respiratory and cardiovascular
	systems, as well as local injuries.

Theoretical questions for the lesson:

1. Causes, diagnosis and home care for fainting, coma of unknown etiology, convulsions, heart pain (angina, heart attack), stroke, acute abdominal pain, poisoning by an unknown substance or unknown gas, insect bites, dogs, venomous snakes.

2. Assistance on the water: recognizing the drowning person, approaching him, transporting to the shore. Home care for drowning.

Practical work (tasks) performed in class:

1. Providing home care in case of electric shock, lightning, drowning.

2. Providing home care for drowsiness, coma of unknown etiology, convulsions, heart pain, abdominal pain, poisoning by an unknown substance, unknown gas, insect bites, dogs, venomous snakes.

TOPIC CONTENT:

ANGIA.

Diagnosis

Paroxysmal, squeezing or pressing pain behind the chest at the height of the load (with spontaneous angina - at rest), lasting 5-10 min (with spontaneous angina - more than 20 min), which occurs when the load bursts or after taking nitroglycerin. The pain radiates to the left and sometimes to the right) shoulder, forearm, hand, shoulder blade, neck, lower abdomen, epigastric region. At an atypical course other localization or irradiation of pain (from a lower jaw to an epigastric area), vivalents of pain (difficult-to-understand sensations, lack of air), increase in duration of an attack are possible. ECG changes may be absent. Evaluation of angina attacks through the prism of unstable angina, taking into account severity classes.

Differential diagnosis. In most cases - with acute myocardial infarction, cardialgia.

Emergency aid

1. With an anginal attack:

- Put the patient with his legs down;

- Nitroglycerin tablets or aerosol 0.4-0.5 mg under the tongue three times every 3 minutes;

- Correction of blood pressure and heart rate.

2. While maintaining an angina attack:

oxygen therapy;

adequate anesthesia with available means;

ECG registration

- In tension angina - anaprilin (propranolol) 40 mg under the tongue (5-10 mg intravenously), in variant angina - nifedipine 10 mg under the tongue or in drops inside;

heparin 10,000 IU intravenously (in the absence of contraindications);

0.125 g of acetylsalicylic acid inside, pre-chewed.

3. Depending on the severity of pain, age, condition:

- Fentanyl (0.05-0.1 mg), or promedol (trimeperidine) (10-20 mg), or butorphanol (1-2 mg), or analgin (metamizole sodium) (2.5 g) with 2.5 -5 mg of droperidol slowly intravenously.

4. At ventricular extrasystoles of III-V gradations:

- Lidocaine intravenously slowly 1-1.5 mg / kg, then every 5 min 0.5-0.75 mg / kg to effect or a total dose of 3 mg / kg. To prolong the effect - lidocaine up to 5 mg / kg intramuscularly.

5. If unstable angina or suspected myocardial infarction - hospitalize the patient.

The main dangers and complications:

- Acute myocardial infarction;

- Acute arrhythmias or conduction;

- Arterial hypotension (including drug);

- Acute heart failure;

- Respiratory disorders during the administration of narcotic analgesics.

ACUTE MYOCARDIAL INFARCTION

Diagnosis

Characteristic chest pain with irradiation to the left shoulder, forearm, shoulder blade, neck, lower jaw, epigastric region; heart rhythm and conduction disorders; there is no reaction to nitroglycerin. There may be options for the onset of the disease: asthmatic (cardiac asthma, pulmonary edema); arrhythmic (fainting, sudden death, MAS syndrome); cerebrovascular (acute neurological symptoms); abdominal (pain in the epigastric region, nausea, vomiting); asymptomatic (indeterminate sensations in the chest).

Differential diagnosis

In most cases: a prolonged attack of angina, cardialgia, pulmonary embolism, acute diseases of the abdominal cavity (pancreatitis, cholecystitis, etc.), stratifying aortic aneurysm.

Emergency aid:

Shown:

1. nitroglycerin tablets or aerosol 0.4-0.5 mg sublingually, repeatedly.

2. For anesthesia (depending on age, condition):

- Neuroleptanalgesia: fentanyl 0.05-0.1 mg, or morphine up to 10 mg, or promedol (trimeperidine) 10-20 mg, or butorphanol 1-2 mg with 2.5-5 mg of droperidol intravenously slowly;

- In case of insufficient analgesia - intravenous fractional administration of morphine, and against the background of high blood pressure - 0.1 mg of clonidine.

3. To restore coronary blood flow:

- As early as possible (in the first 6, and with recurrent pain up to 12 hours from the onset of the disease) - streptokinase 1500000 IU intravenously for 30 min after the injection of 90 mg of prednisolone;

- If streptokinase was not administered - heparin 5,000 IU intravenously, then intravenously (1,000 IU / h):

- Acetylsalicylic acid 0.25 g chew).

4. At complications - see appropriate standard.

5. Hospitalize immediately.

The main dangers and complications:

- Acute cardiac arrhythmias and conduction up to ventricular fibrillation;

- Recurrence of anginal pain;

- Arterial hypotension (including medication);

- Acute heart failure (pulmonary edema, shock);

- Arterial hypotension, allergic, arrhythmic, hemorrhagic complications with the introduction of streptokinase;

- Respiratory disorders during the administration of narcotic analgesics;

- Myocardial rupture, cardiac tamponade.

Notes.

Peripheral vein catheterization is indicated for emergency care (in the first hours of the disease or in case of complications).

Cardiogenic shock is a combination of acute vascular and acute left ventricular heart failure.

Diagnosis

The expressed decrease in arterial pressure in combination with signs of disturbance of blood supply of bodies and fabrics: systolic arterial pressure below 90 mm of mercury. Art., pulse - below 20 mm Hg. Art., symptoms of deterioration of peripheral blood circulation - pale cyanotic moist skin, burning peripheral veins, decreased skin temperature of the hands and feet; reduction of blood flow velocity (time of disappearance of the white spot after pressing on the nail bed or palm - more than 2 s); decreased diuresis (below 20 ml / h), impaired consciousness (from mild inhibition to coma).

Differential diagnosis. It is necessary to differentiate cardiogenic shock from myocardial rupture (requires surgical treatment), pulmonary embolism, hypovolemia, intense pneumothorax, arterial hypotension without shock.

Emergency aid

To carry out emergency care in stages, at inefficiency of the previous - to pass quickly to the following.

1. In the absence of the expressed stagnation in lungs: to conclude with the lower extremities raised at an angle of 20 $^{\circ}$ (at stagnation in lungs - see the standard "Pulmonary edema");

- Oxygen therapy;

- With anginal pain - full analgesia;

- Correction of the rate of ventricular contraction (in paroxysmal tachyarrhythmia with a ventricular contraction rate of more than 150 in 1 min - EIT, in acute bradycardia with a ventricular rate of less than 50 per 1 min - EX);

- Heparin 10,000 IU intravenously.

2. In the absence of severe stagnation in the lungs and signs of high CVP:

- 200 ml of 0.9% sodium chloride solution (or dextran) intravenously for 10 min under the control of blood pressure, respiratory rate, heart rate, auscultatory picture of the lungs and heart (with increased blood pressure and no signs of transfusion hypervolemia - repeat the fluid by the same criteria).

3. Dopamine (dopamine) 200 mg in 400 ml of rheopolyglucin (dextran) or 5% glucose solution intravenously, increase the infusion rate from 5 μ g / (kg \Box min) to achieve the minimum possible perfusion of blood pressure;

- No effect - additional norepinephrine hydrotartrate (norepinephrine) 2-4 mg in 400 ml of 5% glucose solution intravenously, increase the infusion rate from 4 μ g / min to achieve the minimum possible perfusion of blood pressure.

4. Hospitalize after possible stabilization. The main dangers and complications:

- Inability to stabilize blood pressure;

- Pulmonary edema with increased blood pressure or intravenous fluid;

- Tachycardia, tachyarrhythmia, ventricular fibrillation;

- Asystole;

- Recurrence of anginal pain;

- Acute renal failure.

Note

Under the minimum possible level of arterial pressure it is necessary to understand systolic pressure of 90 mm of mercury. Art. and above in combination with clinical signs of improvement of perfusion of bodies and fabrics.

Corticosteroid hormones are not indicated in true cardiogenic shock. Prescribing corticosteroid hormones is appropriate in hypovolemia or arterial hypotension caused by an overdose of peripheral vasodilators (nitroglycerin, etc.)

Insect bites, ticks, spiders, snakes

Every year, more than 10 million people in the world are attacked by poisonous animals, more than 50 thousand victims die. And fatal cases from bee or wasp bites are 3 times more than from rattlesnake bites.

Neighborhood with mosquitoes, gnats, midges and other small insects is rarely pleasant. But it's not just that - their bites can cause quite severe allergic reactions.

Mosquitoes. Due to the specific properties of mosquito saliva, a small redness is formed at the site of its bite, there is itching, a feeling of heat. Itching can be eliminated by moistening the skin with ammonia or baking soda solution: 1/2 teaspoon per glass of water. To avoid being bitten, treat all exposed areas with a repellent (a mosquito repellent) - this product must be in the first aid kit of the traveler or traveling group. Midge. Flies are active on hot sunny days. They are attracted by light clothes and the smell of sweat. The moment of a midge bite is not felt, but after a few minutes there is a feeling of heat, severe itching, large red swelling. The swelling subsides after a few days, but the unbearable itching can bother you for a few weeks. Children usually comb the bite site for blood and ulcers. Numerous midge bites can cause fever and signs of general poisoning. Wipe the skin with ammonia as soon as possible, then apply ice. Inside you can take an antihistamine from a first aid kit (diazoline, cetirizine). To avoid bites, the skin should be treated with a repellent.

Gadfly. Gedi can carry infections. There may be a feeling of heat, swelling, redness of the skin at the site of the bite, and enlargement of the lymph nodes. A gnats bite can quickly turn into a significant swelling with a white blister in the middle. The wound can fester and hurt for up to two weeks, so it should be washed immediately with soap, apply a compress with 40% alcohol and baking soda solution.

Poisonous insects. Among insects there are both active and passive-poisonous species. Bees, bumblebees, wasps, and hornets have a poisonous apparatus in the form of a sting.

Bees. There are about 20,000 species of bees. They can be found on all continents except Antarctica.



Wild bees make nests in tree hollows, at the entrances to caves or under rock ledges. Domestic bees live in hives.

The protection of bees is a sting. But, for example, having stung the person, the bee at once perishes. Burrs on the tips of the bee's prickly bristles, which are on the sting, do not allow it to pull it out of the skin of a human or any other mammal. So, when a bee stings, there is an instant rupture of the whole stinging apparatus, as a result of which the bee dies. If it happens that a bee stings another bee or wasp, then it can easily pull out its sting. Everyone knows that a bee sting is painful. Edema occurs, which can lead to asphyxia when the mucous membranes of the mouth and respiratory tract are affected. When massive doses of the poison enter the body, internal organs, especially the kidneys, can be damaged. In addition, bee venom is a strong allergen. In some people, even a single bee sting can cause an acute reaction and anaphylactic shock.

Bumblebees are close relatives of bees, which differ from them primarily in size and thick long hairs that cover the body. The earth bumblebee is black with two

red bandages on the chest and abdomen and a white-gray tip of the abdomen. In other bumblebees, the pattern and color look different.



Bumblebee bites are accompanied by symptoms similar to bee venom poisoning. There is no significant danger with single bites, except for the possibility of an allergic reaction.

Axes. Conventional wasps use two methods of protection. The passive method is their bright warning color, consisting of transverse yellow and black stripes that scare away birds, lizards and small mammals. Enemies quickly learn to associate this type of coloration with the unpleasant taste of prey, and after a few attempts, leave the wasps alone. The second active way of self-defense is a sting. The sting is a broken tube with no jags. After a wasp sticks a sting into the enemy's skin and injects venom, it does not die, but easily pulls the sting out of the skin and can use it again.



Hornets are the largest European wasps. Hornets live in dense old forests. They attach their "paper" nests to tree branches or build them in rock crevices. The hornet is one and a half times larger than the wasp, in addition, it has a brownish-yellow body color, in contrast to the black-yellow color of the wasp.



It is believed that large ungulates, such as a horse, can die if bitten by a hornet 2-3 times. Fortunately, hornets rarely sting horses, other pets and humans. Hornets attack only in a very irritated state. There have been cases where a person died after one bite of a hornet, wasp or bee. This happens if there is an allergic reaction of the body to the venom of a hornet or bee. Hornet venom affects the circulatory system, lowering intravascular pressure and reducing blood flow in most mammals. This poison was once the subject of scientific interest. Medicines to lower the level of adrenaline in the blood were developed on the basis of hornet venom.

Hornet bites are very painful. Swelling and inflammation appear at the site of the bite. The general picture of poisoning - headache, dizziness, fever, etc. Poisoning may be accompanied by urticaria, difficulty breathing, development of Quincke's edema, in severe cases - anaphylactic shock.

Home care for bee, wasp and hornet bites: use tweezers to remove the sting with a bag filled with venom (if you have been stung by a bee), wipe the bite with a swab, pre-moistened with hydrogen peroxide, apply a cold compress or ice, if occurrence of an allergic reaction to the victim to give antihistamines (antiallergic) drugs. After providing home care, in case of systemic reactions of the body to the bite, urgently refer such a victim to a doctor.

Bees, wasps and hornets are attracted by the aroma of flowers, sweet perfumes, fruits, sweets, drinks and bright clothes, so to avoid the bites of these insects it is necessary:

- going for a walk, wear light, neutral clothes;

- be careful in markets and vegetable stores, near the bucket. If you eat fruit, make sure there are no bees or wasps on it;

- be careful in places of accumulation of stinging insects. If the wasp shows an obsessive curiosity, you should either freeze and wait until it flies away, or move abruptly to another place, but do not wave your hands;

- do not approach beehives and wasp hives, as well as do not make sudden movements, as this provokes an attack of insects;

- if the wasp sat on the sleeve of clothing, you just need to shake it, not slap, otherwise the bite is guaranteed;

- Never drink from the spout of the kettle, cans and bottles that stood open, and first pour the drink into a glass. Look carefully for dangerous insects. Wipe your lips after eating sweets.

Help with the bite.

Consider the basic rules of first aid for bee stings, wasps, bumblebees:

1. Immediately after the bee sting it is necessary to carefully remove the sting from the wound with tweezers or even nails (without crushing the poisonous bubble on the sting), give the victim antihistamines from the first aid kit (diazoline, cetirizine, suprastin, etc.)

2. If a person faints, try to bring him to consciousness by rubbing his temples with ammonia or letting him smell it.

3. Rinse the bite site well with soap and water.

4. Make a bandage from ammonia, diluted with water in a ratio of 1: 5.

5. In severe pain, apply a solution of salt to the bite (half a teaspoon to half a glass of cold water) or just apply a compress of cold water, a bubble of ice.

6. Give the victim a lot of fluids so that the poison is eliminated from the body faster.

7. At a high temperature give the victim antipyretics and call a doctor.

Warning! If a wasp or bee has bitten the eye, lips, mouth or tongue, the victim should be referred to a doctor immediately, as swelling in these areas can be life-threatening. Before the doctor's visit, the place of the bite should be cooled.

If the victim does not regain consciousness or the bite site becomes increasingly swollen, fever, rash, headache, dizziness, difficulty breathing - it is necessary to provide the patient with complete rest and seek medical attention immediately. This reaction of the body indicates an allergic reaction, which can be removed only in medical institutions.

Pincers. Up to 60 species of viruses can spread through the saliva of these insects. The most dangerous of them is tick-borne encephalitis.

The tick can crawl on the body for several hours before biting. But as soon as he finds the soft parts of the body - the bend of the elbow, the inside of the hand, under the armpits, under the knee, behind the ears or in the groin - it is quickly absorbed.

It is not difficult to prevent tick attacks, for this purpose it is necessary to use special means - repellents.

There are several ways to remove ticks. But they all differ only in the tool that removes the tick.



Fig.1. Not the right capture of the tick

It is most convenient to remove with bent tweezers or surgical forceps. Ticks capture as close as possible to the proboscis. Then it is gently pulled and rotated around its axis in a convenient direction. After 1-3 turns, the mite is removed completely together with the proboscis. If the tick tries to pull out, there is a high probability of separation of the head or proboscis (Fig. 132).

If there are no tools, the tick can be removed with a loop of coarse thread. The tick captures the loop as close as possible to the skin and gently, shaking it to the sides, is removed.

Oil treatment will not force the mite to remove the proboscis. The oil will only kill him by clogging his airways. The oil will cause the tick to vomit in the morning, which can increase the risk of infection. Therefore, the oil, which is often recommended for removing ticks, should not be used.

After removing the wound is treated with iodine or other antiseptic for the skin. Hands and tools should be washed thoroughly after removing the tick.

If there is a head with a proboscis left in the backpack, there is nothing wrong with that. The proboscis in the wound is similar to a splinter. If the proboscis of the tick sticks out above the surface of the skin, it can be removed by clamping with tweezers and unscrewing. It can be removed by a surgeon at the clinic. If the proboscis is left in the skin, then there is a small abscess, and after a while the proboscis comes out.

It is best to have a special device in the first aid kit to safely remove ticks. Such devices are a loop or hook, which captures the tick at the lowest point of its contact with the skin. After that, the tick "unscrews" (regardless of or counterclockwise) while pulling it. This method allows you to remove the tick completely with maximum safety for the victim.

When removing a tick it is FORBIDDEN:

Apply to the bite caustic liquids - ammonia, gasoline, and others.

Bake the tick with a cigarette.

Pull the tick sharply - it will break.

Peeling in the backpack with a dirty needle.

Apply various compresses to the bite site.

Squeeze the tick with your fingers.

The removed tick should be destroyed or (better) transferred for analysis by placing in a jar.

If the tick was not a carrier of a dangerous virus, the wound heals in a week. But you need to watch her for the next three months and in case of her redness, headache, muscle pain, see a doctor. You should also seek medical attention if your temperature rises during this time. Be sure to tell your doctor about the tick bite.

Among the spiders in the fauna of Ukraine are dangerous to humans Karakurt and tarantula.

Karakurt is one of the most dangerous species of spiders. Its bite is 50 times more poisonous than a tarantula bite. Mortality from its bite, scientists estimate is about 4%, and the venom is 15 times stronger than the venom of a rattlesnake.





These spiders have 8 eyes, which are arranged in 2 rows. Their chelicerae are vertical and not very large. Legs without thick spines, but with numerous bristles. At the end of the legs are 3 claws: the main toothed and additional - strongly elongated. The abdomen is often round, even spherical. The respiratory organs are represented by 1 pair of pulmonary sacs and 1 pair of tracheas. The danger is a female Karakurt, which has a size of 10 to 20 mm. The male has a size of 4-7 mm and is safe for humans. Fully mature individuals sometimes acquire a black color without spots, with a characteristic luster.

During reproduction, red spots appear on the abdomen of females. Males are smaller than females. After mating, if the male does not have time to escape, the female eats it, for which she was named "black widow".

Favorite habitats of Karakurts - wormwood, wastelands, shores, ravine slopes. Karakurt likes to settle in stone rubble, mouse holes, walls, cracks, places of storage of firewood, in outbuildings of private houses, dark corners of garages, in stables, barns and piles of dry old garbage, in shoes. The main feature of the behavior of Karakurts is that they like to weave a web around holes and holes, or placing it horizontally, unlike the web of most other spiders. Karakurt spiders are common in southern Ukraine, near the Sea of Azov. Karakurts have appeared in the Kherson region for a long time, they are found on the Kinburn Spit, the Salt Lake District, Dzharilgachi, the coast of the Cote d'Azur and the Iron Port, Burkuty, and now it is found in the area of the Tavria housing estate and Kindiyka. In the Odessa region on the Katran spit, along the coast.

An unprovoked Karakurt never attacks a person. A spider attack is a defensive reaction to an invasion of "his" territory.

The spider does not bite very painfully, a small red spot appears at the site of the bite, which quickly fades or disappears. The bitten place does not swell, the pain passes quickly, and in a dream the bite can not be noticed.

After some time - from 15 minutes to 6 hours - at the site of the bite there is intense sharp pain that spreads to the abdomen, chest and lower back, abdominal muscles tense, difficulty breathing and numb legs. There is a strong mental arousal, the victim is clearly restless, feels the fear of death. Often there are dizziness, headache, shortness of breath, convulsions, vomiting. Characterized by bruising of the face, slowing and arrhythmia of the pulse. Then the patient becomes lethargic, but continues to behave restlessly, severe pain deprives him of sleep. Usually, the shorter the time between the bite and the development of symptoms, the more difficult the clinical picture. Symptoms usually last 24-48 hours, but in severe cases - much longer, up to several days.

Complete recovery occurs in 2-3 weeks, but the weakness remains for more than a month. In severe cases, in the absence of medical care, a day or two after the bite, death occurs.

Home care:

1) In the first 2-3 minutes, you can burn the place of the bite of Karakurt with the flame of a lighted match, for which 1-2 matches are pressed with their heads to the place of the bite and set on fire with the 3rd match. As the surface layer of the skin is affected (up to 0.5 mm), the flame of matches is enough to destroy the toxin. Ice should also be applied to the bite site.

2) Give the victim from the first aid kit antihistamines (diazoline, cetirizine, etc.), with increasing pain - painkillers (aspirin, paracetamol, ibuprofen, etc.), other drugs from the first aid kit to reduce symptoms of poisoning, such as sedatives, etc.

3) Take the victim to a medical institution, where he will be injected with anti-Karakurt serum or other detoxification therapy. Poisonous arachnids.

Crimean scorpion. Occurs along the southern coast of Crimea from Sevastopol to Kerch. The body is elongated, yellow-brown, 35-40 mm long with 5 pairs of long limbs. The first pair is armed with claws. Eyes - 6 (pair on top and one pair on each side). For life he chooses cracks, stones, old buildings.



A scorpion bite is painful. Redness, numbness, and swelling appear at the site of the bite, and blisters filled with clear fluid may form on the skin. The degree of poisoning may be mild, but in severe poisoning the patient experiences chills, palpitations, fear, nausea, shortness of breath. Possible convulsions (especially in children), loss of consciousness. The patient may die from respiratory paralysis. Another interesting property of the scorpion is its extraordinary resistance to radiation. Scorpios can withstand doses that far exceed the lethal to humans and most other animals. Listed in the Red Book of Ukraine. Tarantulas are large, mobile, hairy spiders. The adult female is 2-5 cm long and weighs 5-8 grams. The male is much smaller. The spider has a brown body with orange spots on the legs and abdomen. Belong to spiders that do not weave webs. Instead, they live in deep burrows near the water. Therefore, they can often be found in river valleys, lakes and swamps, where the ground is wet. In winter, they close in their homes, fenced off with a roller made of grass, intertwined with cobwebs, and sleep there until spring.



Tarantulas wait for their victims like tigers. They hide among the leaves, debris or in their burrows. When an insect appears nearby, they catch up with it, bite it with chelicerae, inject venom and exoenzymes, and drag it into their burrows. The bite paralyzes and kills the insect, as well as digests its internal contents. Tarantulas do not chew or swallow their prey, they suck out partially digested contents, and solid remains are thrown out of the burrow.

Tarantulas are distributed in southeastern Europe, southwestern Asia, Crimea, desert, steppe and forest-steppe zones. They are also found in the Kiev region. Specialists of the State Sanitary and Epidemiological Service have currently registered the presence of tarantulas in Kaharlyk and Bila Tserkva districts.

The bite causes severe pain that persists throughout the day, followed by reddening of the skin and swelling. General manifestations are absent or weakly expressed. With hypersensitivity to the poison may be dizziness, weakness, loss of consciousness. The bites of other species of spiders can mainly cause only pain, but allergic reactions are possible. First aid for spider bites: treatment of the wound with antiseptics, aseptic bandage, cold at the site of the bite, antihistamines (antiallergic) drugs. Seek medical attention immediately after first aid.

Venomous snakes. Of the venomous snakes, only vipers are common in Ukraine. In total, there are 5 species: Common Viper, Steppe Viper, Nikolsky Viper, Renard Viper and Nose Viper, which are very unevenly distributed throughout the country. The largest number of them in the southern and eastern regions - 5 species, and the smallest - in Western and Northern Ukraine - 1 species. Everywhere in

Ukraine there is only the Common Viper. It inhabits all suitable areas from the Carpathian meadows at altitudes over 1800-2000 m above sea level, to the plains of the Black Sea coast and the swamps of Polissya.

The venom of our vipers is very dangerous and in its properties and action is equated to the venom of a rattlesnake, but the bite of a viper is non-fatal and only in emergencies can be fatal. This is due to the fact that the amount of venom that the snake injects into the victim is negligible, and its production is an energy-intensive process, so the viper always saves its deadly weapon. At the slightest opportunity, the viper tries to escape or, lurking, wait for the presence of man. Only in the case of direct deliberate provocation by a person, or if a person accidentally stepped on a viper, it uses the last line of defense - a deadly poison. The venom is produced by two venomous glands located in the upper jaw and connected to the hollow canines. When bitten, the venomous teeth protrude from special sacs in which they are constantly contained, penetrating deep into the victim's body, and the powerful muscles surrounding the venom capsules are sharply contracted and the venom is injected into the victim under pressure. The bite lasts only a few tenths of a second, so it resembles a strong blow rather than the bite itself.



Common or live-bearing viper - the most common in Ukraine.

These are small snakes - a maximum of 60-70 cm, and usually their length varies between 30-50 cm. Its special feature is the presence of three large and a number of small shields in front of the conditional line that connects the front edges of the eyes. The nostrils are cut in the nasal shields. The front of the head is rounded. The colors are very diverse - from light gray and blue, to copper red and black with a dark rhombic pattern on the back. Common habitats are well-heated edges, forest glades, forest belts, overgrown ravines and beams, steppe slopes with shrubs and more.

The steppe viper is a common species in the central, eastern and southern regions of Ukraine, west of Khmelnytsky and Vinnytsia regions it has never been detected.

The species is protected by the Berne Convention ratified by Ukraine. The size is almost the same as the common viper - 60-65 cm. The front of the head is slightly elongated, its edges are raised. A number of small irregularly shaped shields are clearly visible in front of the frontal and superficial shields. The intermaxillary shield usually touches one of the apical ones. The airway is cut in the lower part of the nasal shield. Painted steppe viper in brown shades with a dark rhombic pattern on the back. On each side of the body there is a row of small blurred spots. Dark color is extremely rare. It occurs in bushy steppe beams, ravines, floodplains, forest belts.

Viper Nikolsky - widespread in the southern and eastern regions of Ukraine.



Previously, it was considered a common snake of dark color, but detailed studies have shown its differences and belonging to a particular species. This is the largest viper in Ukraine - the body length of adults is 76-80 cm. The head is large, slightly convex, well separated from the neck. The color is black with a slightly noticeable rhombic pattern on the back. Young animals - up to three years - have a grayish-brown color, and later they darken. A special feature is the bright yellow or orange color of the underside of the tip of the tail. Lives on the edges, forest glades, forest belts, composed of deciduous trees, and in pine - extremely rare.

Renard Viper is the only viper in Ukraine that has a conservation status and is listed in the Red Book as an endangered species.



Distributed very unevenly, most finds are known from the Black Sea lowlands and Slobozhanshchina. The northernmost is the south of Kyiv region, and the westernmost is the south of Khmelnytsky region. Formerly considered an eastern subspecies of the steppe viper, it is now isolated as an independent species, although some herpetologists argue about its status. Lives in wormwood steppe, beams with shrubs, forest belts.

The nose viper is the rarest viper in Ukraine, as it occurs only in the Danube Delta. A special feature is a specific growth on the tip of the nose 3-7 mm long. The length of the body varies between 60-70 cm. The color varies - from almost white with a black rhombic pattern to copper-red with the same pattern along the back. It lives in forests and bushes overgrown with beams and valleys. Fatalities from the bites of the viper have never been recorded.



All vipers feed on small rodents and birds, and are themselves hunted for storks, birds of prey and mammals. Thus, as a link in ecosystems, they deserve our protection and care.

Snakes living on the territory of Ukraine do not attack humans first. A snake bite is a forced and extreme measure of its self-defense. The bite of a viper is almost immortal, although it has unpleasant consequences. Immediate home care can reduce these effects.

Give the victim a horizontal position, limit his movements as much as possible, especially the affected limb.

Never apply a tourniquet to prevent blood poisoning from spreading throughout the body. This manipulation not only has no effect, but on the contrary complicates the patient's condition. Snake venom is spread mainly by lymph in the lymphatic vessels, which lie shallow under the skin and are easily squeezed. An effective and safe way to slow down the lymph flow and, consequently, the spread of the poison on the recommendation of the American Heart Association is to apply a pressure immobilizing bandage along the entire length of the bitten limb.

Don't confuse applying a pressure bandage with applying a tourniquet!

In the morning, the bite site should be treated with an antiseptic and a sterile bandage applied. Move the bitten limb as much as possible (after applying the pressure bandage, tie the bitten leg to the healthy one, fix the arm with a bandage over the neck). As the poison enters the bloodstream, symptoms of general intoxication of the body appear: headache, a feeling of brokenness, weakness, low blood pressure, in severe cases, convulsions. To reduce the general intoxication, the victim should be given plenty to drink. Give antihistamines (diazoline, cetirizine, suprastin).

After these measures, the victim should be taken to hospital immediately.

The most effective method in the field has always been considered to be intensive germinal suction of the poison in the morning for 10-15 minutes, followed by thorough rinsing of the mouth with water, but it is better to do it with some devices (cut syringe, sometimes it is recommended to put a blood-sucking jar). Even if you have it, it will take the most precious minutes to prepare, so this method is unlikely to be practical, although if someone helps you - you can try.

Poisonous amphibians. In Ukraine, the spotted salamander is found in deciduous, mixed, rarely coniferous forests of the Carpathians of the Transcarpathian region, and some areas of the Carpathian regions (Lviv, Chernivtsi, Ivano-Frankivsk). Sometimes some representatives of the species are found further east (in Volyn, Zhytomyr, Kyiv and even Dnipropetrovsk regions), but these animals were most likely brought there by humans.





Adult animals usually lead a twilight-night lifestyle, but when the humidity increases on cloudy or rainy days, salamanders can be active during the day. The latter is characteristic of females during the breeding season. The salamanders' daytime shelters are usually rotten stumps, damp leaf litter, cavities under rocks, although there have also been cases where they have dug their own burrows in soft soil.

The venom of the skin glands of the spotted salamander acts on the nervous system and is quite toxic to mammals, its average lethal dose is 1.2 mg per 1 kg of victim weight. It is possible that the protective function of skin secretions is also associated with their antifungal and antibacterial action.

Poisonous fish.

The great dragon (sea dragon, sea scorpion, snake) (Trachinus draco) is a fish with an elongated body.





It has a body length of not more than 30 cm. The lower jaw is longer than the upper, the mouth with small conical teeth is directed obliquely upwards. Eyes on the top of the head. These fish have two dorsal fins: the first, short, with 5-7 spines, the second dorsal and anal long. Abdominal fins are located on the throat. The scales are very small, cycloid, arranged in oblique rows. It feeds on small fish, worms and crustaceans.

Sea dragons live mainly in shallow bays and coves with Sea dragon being the most poisonous Black Sea fish. Poisonous prickly thorns of the first dorsal fin and gill cover. The poison affects the blood cells and the nervous system. In particularly severe cases, fever, shortness of breath, paralysis of the extremities, speech disorders, and death may occur. In case of a sea dragon injection, it is necessary to consult a doctor. When providing home care, it is necessary to wash the wound with alcohol, warm water or a solution of sandy or muddy bottom. They are quite active, but usually bury themselves in soft soil so that only the upper part of the head, mouth, eyes and spines of the dorsal fin are visible.

potassium permanganate and remove the remnants of hairpins from the wound.

The common starfish (or sea cow). It feeds on invertebrates and small fish. They have no industrial significance. Marine subtropical fish.



In adulthood it reaches 40 cm in length, usually about 20-22 cm. The body is massive, elongated. The scales are very small. The large head is covered with a shell of bone plates. At the end of the lower jaw is a small leathery worm-like growth that is used to attract prey. Above the pectoral fins is a poisonous thorn pointing upwards.

The color varies depending on the environment. From light to dark brown with black marble spots. The first dorsal fin is black, the pectoral fins are light blue, the caudal fin has a white border.

From late May to September, she has poisonous spines on her head and above the pectoral fins. Poisonous prickly thorns of the first dorsal fin and gill cover. The venom is similar to that of a sea dragon, affecting blood cells and the nervous system. In particularly severe cases, fever, shortness of breath, paralysis of the extremities, speech disorders, and death may occur. In case of sting of a stargazer, it is obligatory to consult a doctor. When providing home care, it is necessary to wash the wound with alcohol, warm water or a solution of potassium permanganate and remove the remnants of hairpins from the wound. No fatalities were observed in the Black Sea.

The stingray (or common stingray) is a species of stingray that lives in the Northeast Atlantic, as well as in the Mediterranean and Black Seas. It usually lives on sandy and silty soils on coastal shoals up to 60 m, buried in the ground.





The tail has one or more stylet-like serrated spines up to 15 cm long. The venom affects the nervous system. Particularly dangerous injections into the torso and head. The victim may experience a decrease in blood pressure, palpitations, muscle paralysis, vomiting. In particularly severe cases, death can occur.

Bite prevention

Snakes themselves do not actively attack people and bite only for self-defense. When approaching a person, the snake tries to escape, warns of its presence by hissing, takes an aggressive position. During the breeding season (usually after hibernation), most species of snakes become very dangerous.

Snakes often bite people in the lower extremities, so one of the most important measures to prevent snake bites is to wear boots with high heels. To prevent bites in the hands when performing work involving the movement of objects lying on the ground, you must first inspect the workplace. When moving in the bushes, the road should be checked in front of you with a long stick.

For overnight stays outside the settlements choose hills with sparse low vegetation, remote from the burrows of rodents and rock gorges. Remember that snakes are attracted to bright light and heat, as a result of which they can crawl to the fire or climb into bed with a sleeping person. If a person wakes up and feels the presence of a living creature (possibly a snake), he should not make sudden movements.

Before going to bed, it should be carefully inspected, and the entrance to the tent tightly closed.

You should refrain from swimming in unfamiliar places and remember that all species of snakes can swim.

It is necessary to make efforts to eliminate the conditions conducive to the reproduction of snakes: to destroy bushes, debris, dense vegetation, remove stones, logs. Deratization measures - the destruction of potential snake food - are also an effective means of controlling their population.

Bites of people and animals

Bites from humans and animals can cause damage to the integrity of the skin. In addition, the bites of humans and animals can lead to both infection and disease of the victim (tetanus, rabies, various types of fever).

Bites of people. Human bites, which disrupt the integrity of the skin, can pose a serious danger in terms of infection through the wound, because there are always many bacteria in the mouth. The wound should be treated with antiseptic, a sterile bandage applied, and the victim evacuated to a higher level of medical care. In all cases of such bites, medical attention should be provided by a physician.

Animal bites. Due to the possibility of developing life-threatening diseases, the bitten animal must be caught and killed without injuring the head. The head is

then sent for examination to determine whether the animal was a carrier of any disease.

Home care consists in thoroughly cleaning the wound with a soap solution, rinsing it with water, applying a sterile bandage, immobilizing the limb and evacuating the victim to a higher level of medical care.

Providing home care to victims of suspected acute poisoning by an unknown substance

1. This Procedure determines the mechanism of providing home care to victims of suspected acute poisoning by an unknown substance by non-medical personnel.

2. In this Procedure, the term "acute poisoning" is used in the following sense - it is a rapid dysfunction or damage to organs due to the action of poison or toxins that have entered the body or formed in it.

Other terms are used in the meanings given in the Fundamentals of the legislation of Ukraine on health care and other regulations in the field of health care.

3. Toxic substances can enter the body of victims in the following ways:

1) gastrointestinal tract: when eating or in contact with toxic substances with the mucous membrane of the oral cavity (drugs, cauterizers, detergents, pesticides, fungi, plants and other various chemicals);

2) respiratory tract: inhalation of toxic gases, vapors and aerosols (carbon monoxide; nitrous oxide; chlorine vapor, ammonia, glue, dyes, organic solvents, etc.);

3) skin and mucous membranes: in case of contact with the skin and eyes of toxic substances in the form of liquid, aerosol (solvents, pesticides, etc.);

4) injections: insect, animal or snake bites. When injecting drugs or narcotics.

4. Signs that indicate acute poisoning: a feeling of "sand" or tingling in the eyes, photophobia; burns on the lips, tongue or skin; pain in the mouth, throat, chest or abdomen, which is aggravated by swallowing and breathing; increased salivation, nausea, vomiting (with a specific odor, residues of toxic substances, blood); respiratory disorders (shortness of breath, loud breathing, voice change, cough); sweating, diarrhea, unusual behavior of the victim (agitation, delirium); muscle twitching, convulsions, loss of consciousness; unusual skin color (pale, crimson, bluish).

5. The sequence of actions in providing home care to victims of suspected acute poisoning by an unknown substance by non-medical workers:

1) make sure there is no danger;

2) when inspecting the scene, pay attention to the signs that may indicate acute poisoning: unpleasant pungent odor, flames, smoke, open or overturned containers, containers for drugs and alcohol, open first aid kit, used syringes, etc .;

3) specify what exactly and in what quantity the victim received;

4) examine the victim, determine the presence of consciousness, breathing;

5) call an emergency (ambulance) team;

6) if the victim has no breathing, start cardiopulmonary resuscitation;

7) if the victim is unconscious, but he has maintained normal breathing, transfer the victim to a stable position. Ensure constant supervision of the victim until the arrival of the emergency (ambulance) team;

8) if the victim is conscious and it is known that the poison was taken orally (by mouth), gastric lavage "restaurant" or vomiting method to obtain clean wash

water: the adult should drink 500-700 ml (2-3 glasses) of clean, cold (18 $^{\circ}$ C) water, then it is necessary to cause vomiting; repeat washing to obtain clean wash water;

9) after gastric lavage, give the victim enterosorbent (for example, up to 50 grams of activated charcoal) and laxative (adults - 50 ml of Vaseline oil). However, in case of poisoning with cauterizing substances (for example, gasoline) and disturbance / absence of consciousness, it is forbidden to induce vomiting in the victim;

10) in case of contact with the poisonous substance in the eyes and / or on the skin, wash the affected area with plenty of clean, cold (18 $^{\circ}$ C) water. In the presence of chemical burns (after rinsing with water), apply a sterile bandage to the burn site;

11) provide constant supervision over the victim until the arrival of the emergency (ambulance) team;

12) in case of deterioration of the victim's condition before the arrival of the emergency (ambulance) team, call the emergency medical dispatcher again.

Drowning is a type of mechanical asphyxia in which any fluid (water, wine, oil, etc.) that enters the airways is a mechanical factor. In order for a person to die from drowning, it is not necessary to immerse the body in a large body of water. A person can drown even in a puddle, pelvis, tub, etc. This is possible in cases where a person in a state of intoxication or, for example, during an epileptic seizure falls face down in a puddle of water.

The person, being under water, at first holds a breath usually within 1 min., Sometimes a little more that depends on endurance and training. When it is no longer possible to hold your breath, your mouth opens and water enters the airways rapidly, while partially entering the stomach. The person begins to breathe in water - there is a period of shortness of breath. During the first breath, water enters the throat, which irritates the mucous membranes and causes a cough. After that there is a short cessation of breathing, then there is a final breath, which after 5-6 minutes. stops, and after 10-15 minutes. death comes.

First aid for drowning

In the event of an accident, the drowning person must be assisted as soon as possible. If there are no life-saving equipment (boat, lifebuoy) at the scene, the drowning person must be rescued by swimming. Thus the rescuer should know sequence and quickly carry out actions necessary in this or that situation. First you need to get as close as possible to the shore in front of the place where the person dies, taking off his clothes and shoes on the go. Then enter the water and swim taking into account the speed of the current, while maintaining strength for rescue operations. If the victim is immersed in water, it is necessary to dive and find him. When the victim is lying on the bottom, then, approaching him, you should embrace him under your arms, push off from the bottom and float to the surface of the water. If the drowning man is struggling on the surface, you should try to calm him down and it is better to swim behind, because he can catch the rescuer in a hurry.

The rescuer must remember that when the drowning person grabs him and does not let go, immersion under water helps to release him, as the drowning person will seek to stay above the water. If this method does not allow you to get rid of it, you should use pain or pain in combination with immersion.

The nature of assistance after removing the victim from the water depends on the severity of his condition. Drowning can cause so-called "blue" and "white" asphyxia. Blue asphyxia occurs when water enters the airways and stomach. White asphyxia occurs when there is a sudden cessation of breathing under water, as a result of which water almost does not get into the airways. In this state, measures aimed at resuscitating the drowning person are carried out immediately after removing him from the water. If the victim has not lost consciousness, the pulse and respiration are satisfactory, he should be placed on a hard dry surface so that his head is low, undressed, rubbed with a dry towel, changed into dry clothes, wrapped in a warm blanket and given hot tea or coffee. If there is no consciousness, but there is a pulse and breathing, it is necessary to bring cotton wool soaked in ammonia to the victim's nose, put the victim upside down and clear the airways of mucus and foreign bodies.

When stopping the heart and breathing, use the simplest methods of revitalizing the body (artificial lung ventilation and indirect heart massage). But first of all, you need to free the airway and stomach of the victim from water as soon as possible. After first aid, regardless of the severity of the condition, the victim should be sent to the nearest medical facility, as even in mild cases of drowning, serious complications can occur, which can lead to death.

Do not forget that the heat transfer in the water is several times greater. Therefore, the less your body is in the water, the better. Clothes should not be dropped if they do not pull to the bottom. A naked person loses heat much faster, so even in warm water you only need to move to stay afloat.

To avoid cramps, you need to do static exercises, alternately tensing the muscles of all parts of the body. If you start to "grab a cramp", you should take a deep breath, dive into the water with your head, straighten your leg and pull hard on the big toe. Repeat this until the seizures pass.

If you are in a life jacket, use a special position to keep warm: lying on your back, keep your head above the water, hands on both sides of the chest, bend your knees and pull them up to your chin. This can avoid cooling the limbs and pelvic organs.

High voltage electrical voltage (> 1000 volts) causes damage to deep tissues and muscles. These injuries are not extensive, but deep. It is necessary to immediately stop further exposure to current: turn off the switch, pull out the plug, turn off the light. Discard the wire from the victim with a dry stick. If possible, stand on the insulating material (rubber mat, stack of newspapers) before doing so.

Warning!

Water conducts electricity. If you touch the victim with even a slightly damp object, you can become a victim yourself.

It is dangerous to touch the victim with bare hands if the current continues.

In case of mild lesions (short-term loss of consciousness, dizziness, headache), it is sufficient to apply a dry bandage to the burn site and provide rest to the victim. In very severe cases (clinical death) should immediately begin recovery measures (resuscitation) - artificial respiration and indirect heart massage. When the victim regains consciousness, he should be comfortably placed, warmly covered, and given plenty of fluids to drink.

First aid for lightning strikes

If you have a person struck by lightning, the main thing for both of you to act quickly and clearly:

1) Put the victim

2) If the lily is lucky and she just has a shock (loss of speech, consciousness) - try to bring her out of shock and call 103.

3) If the lightning strike was direct and strong - you need to do mouth-to-mouth resuscitation as soon as possible (have ammonia with you - come on) and indirect heart massage (if you are over 16 and you do not know how to do it - find out immediately about it on the Internet!)

4) Try resuscitation without stopping, because you have only 10 to 15 minutes, after which the chances of survival are slim. Call 103.

The main thing, always remember - during a thunderstorm you should not hide from the water, as many people do, happily running under the nearest metal canopy of the bus stop ... In fact, you should hide and escape not from the water, but from lightning, because it kills!

In the final part of the lesson, the teacher summarizes the lesson, answers questions and checks how students understood the above material.

Materials for self-control:

TASK 1. In the waiting room of the bus station, a 60-year-old man grabbed his chest in the heart, squirmed in pain. Everything happened before your eyes. Provide home care.

Sequence of execution: perform priority actions. Introduce yourself, offer your help and, if you agree, ask what happened that worries you? In case of sharp pain behind the sternum, which gives in the left arm, a feeling of fear, shortness of breath immediately call an ambulance. Place the person in a comfortable position. Unbutton clothes, give fresh air access to the room. Ask if the victim is taking any medication recommended by the doctor. If so, help accept them. If possible, take an aspirin tablet from the bus station first aid kit and let the victim chew, regardless of taking other drugs, after asking. whether he is allergic to the drug. Before the arrival of the emergency medical team Provide temperature comfort. Monitor the condition of the victim, ensure peace.

TASK 2. At work, one of the workers began to complain that he suddenly felt weak in his right leg. When walking, the leg stopped holding the load. What is the possible diagnosis? What actions need to be taken to clarify the diagnosis. Provide home care.

Sequence of execution: perform priority actions. Introduce yourself, offer your help and, if you agree, ask what happened that worries you? Sudden weakness in the leg indicates a probable stroke. To clarify the diagnosis, place the victim in a semisitting position and ask him to alternately raise first the arms and then the legs - the right leg rises weaker. Ask to squeeze the palms of your hands, placing your right hand in the victim's right hand and your left hand in the victim's left hand (assessing the symmetry of muscle contraction). Ask him to smile (assess the symmetry of facial muscle contraction), say a simple sentence (assess the synchronicity of respiratory muscles and vocal cords), which indicates the depth of the lesion. Call the EMD team. Do not allow the victim to eat or drink. Always be near the victim. Place it in a convenient position. Unbutton your clothes, give fresh air access to the room. Prior to the arrival of the EMD team, ensure temperature comfort. Monitor his condition, provide peace. In case of fainting, move to a safe position on the side.

PROBLEM 3. Citizen A., preparing to treat a potato field with an agrochemical, pre-dissolved its concentrate in a bottle of mineral water and left it in the pantry. His grandson, 8 years old, playing in the yard, ran into the closet and took a few sips of "mineral water". After a while he felt general weakness, abdominal pain, a feeling of "sand" in his eyes, nausea, vomiting. Citizen A. discovered a lack of the contents of the bottle of mineral water and the unusual behavior of his grandson. after the question: "Did you drink from this bottle?", the grandson gave an affirmative answer. Citizen A. turned to you for help.

Sequence of execution: perform priority actions. Call the EMD team. Rinse the stomach by vomiting until clean rinsing water is obtained (give clean cold water to drink (18 oC), then induce vomiting). Rinse to obtain clean wash water. After gastric lavage, give the victim an enterosorbent in a dose according to the instructions to the drug. Always be near the victim. Place it in a convenient position. Unbutton your clothes, give fresh air access to the room. Prior to the arrival of the EMD team, ensure temperature comfort. Monitor his condition, provide peace. In case of fainting, move to a safe position on the side.

TASK 4. During the campaign, a 44-year-old woman was bitten by a snake in the leg. Provide home care.

Sequence of execution: perform priority actions. Call the EMD team. Her arrival time is 60 minutes. Immediately after the bite, squeeze a few drops of blood from the wound or suck out the poison, it is better to put a jar (take a container made of glass or metal with a volume of about 100 ml and a diameter wider than the bite. - under the jars, put it over the wound). Next, apply a napkin soaked in hydrogen peroxide solution to the wound. It is better to immobilize the limb, to apply something cold to relieve pain. Prior to the arrival of the EMD team, ensure temperature comfort. Monitor his condition, provide peace. In case of fainting, move to a safe position on the side.

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