



ОҢТҮСТІК ҚАЗАҚСТАН MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SKMA -1979-	SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казakhstanская медицинская академия»
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METHODOLOGICAL GUIDELINES FOR PRACTICAL CLASSES

Discipline:	"General Surgery"
Discipline code:	GS 3305
Title of the EP:	6B10115 «Medicine»
Volume of study hours/credits :	90 h. (3 credits)
Course and semester of study:	3 course, V semester
Practical (seminar) classes:	24 hours.

Shymkent, 2024 y.

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Methodological guidelines for practical classes were developed in accordance with the working program of the discipline (syllabus) "General Surgery" and discussed at a meeting of the department

Protocol № 10^б. 3005 2024

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1. Topic № 1. Asepsis.

2. Goal: To familiarize students with the organization and principles of the admission department and its equipment. To teach how to apply a set of therapeutic and preventive measures to combat surgical infection in the surgical department and operating block. To familiarize with the basic methods of asepsis.

3. Learning objectives:

The student should know:

- Structure, organization and principles of operation of the surgical and admission department, operating unit;
- Equipment of the surgical room of the clinic;
- Basic complexes of work of medical and preventive measures;
- Orders for the prevention of hospital infections;
- The concept of asepsis.

The student must be able to:

- Prepare medical documentation;
- Perform general cleaning;
- Master additional methods of preventing suppuration of surgical wounds;
- Prepare medical documentation;
- Perform general cleaning;

4. Main questions of the topic:

- Principles of operation of medical and preventive institutions;
- Structure of the admission, surgical department;
- Equipment of the operating unit and surgical room of the clinic;
- Sanitary and epidemiological regime of the surgical department and operating unit;
- Routes of infection transmission and their prevention;
- Sterilization methods;
- History of asepsis;
- Prevention of endogenous infection of wounds.

5. Methods/technologies of learning and teaching:

- Discussion of the lesson topic, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies

Work on other nursing subjects, oral questioning, solving situational problems, modeling the situation.

7. Literature (primary and secondary): indicated in the syllabus

8. Control: (tests, situational tasks included)

Which medical and preventive institutions are outpatient and inpatient?

1. What are the operating principles of medical and preventive institutions?

2. What activities are carried out in the admissions department?

3. What is the structure of the surgical department?

4. List the areas of the operating block

5. What manipulations are carried out in the surgical room of the clinic?

6. Give the concept of the sanitary and epidemiological regime of the surgical department and operating block?


7. What are the routes of infection transmission?

8. Explain the prevention of the route of infection transmission?


Test questions:

1. The surgeon's hands are treated with Pervomur in ... minutes.

- a. 1
- b. 2

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- c. 3
- d. 5
- e. 10
2. Prevention of airborne infections does not include:
 3. a. treatment of the surgical field
 4. b. bactericidal lamp
 5. c. ventilation
 6. d. wearing a mask
 7. e. wearing a shoe cover, cap
8. 8. The surgical field is treated using the method:
 9. a. Filonchikov - Grossikh
 10. b. Lukashevich - Oberst
 11. c. Spasokukotsky - Kochergin
 12. d. Alfeld
 13. e. Flurbringer
14. 14. Chemical and antibacterial drugs are used for ... purpose to combat infection in a wound.
 15. a. therapeutic and prophylactic
 16. b. immunostimulating
 17. c. detoxifying
 18. d. immunocarrying
 19. e. detoxifying
20. 15. ... cleaning is not performed in the operating room.
 21. a. special
 22. b. general
 23. c. preliminary
 24. d. current
 25. e. final
26. 16. Non-existent type of antisepsis:
 27. a. thermal
 28. b. mechanical
 29. c. physical
 30. d. biological
 31. e. Chemical
32. The founder of antisepsis in surgery is:
 33. a. D. Lister
 34. b. M. Ya. Preobrazhensky
 35. c. A. A. Charukovsky
 36. d. Bergmann
 37. e. Subbotin
38. 33. The most common complication of antibacterial therapy is:
 39. a. allergic reactions
 40. b. CNS damage
 41. c. ototoxicity
 42. d. nephrotoxicity
 43. e. hepatotoxicity
44. 34. A drug related to proteolytic enzymes:
 45. a. trypsin
 46. b. decaris

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47. c. thymolin
 48. d. rhythmilene
 49. e. kefzol
 50. 35. Physical antisepsis includes:
 51. a. ultrasonic cavitation
 52. b. excision of wound edges
 53. c. washing the wound with chlorhexidine solution
 54. d. suturing
55. e. Immunotherapy

Situational task:

№1. After performing a purulent operation, the nurse carefully washed the scalpels, suture and injection needles in running water and boiled them in a soda solution for an hour.
 Did the nurse do the right thing?

1. Topic № 2. Blood groups. Rh factor. Blood transfusion.

2. Goal: To consolidate and expand students' knowledge of general transfusion issues. To teach how to determine blood groups and the Rh factor. To teach how to identify indications and contraindications for blood transfusion and blood substitutes. To introduce blood transfusion methods. To teach how to master the skills of providing medical care to patients with various complications encountered during blood transfusion.

3. Learning objectives:

The student must know:

- History of blood transfusion
- Concept of transfusiology
- Indications and contraindications for blood transfusion
- Mechanism of action of transfused blood
- Blood groups according to the ABO system.
- Main blood transfusion agents.
- Types of complications after blood transfusion.


The student must be able to:

Direct blood transfusion

- Perform a biological test
- Determination of blood groups using standard serums and erythrocytes.
- Determination of the Rh factor.
- Determination of blood for individual compatibility.
- Determination of blood for compatibility by the Rh factor.
- Providing first aid for complications after a blood transfusion.

4. Main questions of the topic:

- History of blood transfusion
- Concept of transfusiology
- Indications and contraindications for blood transfusion
- Mechanism of action of transfused blood
- Agglutination, types of agglutination, causes of agglutination.
- Direct blood transfusion.
- Main blood transfusion agents.
- Determination of blood groups according to the ABO system.
- Complications during blood transfusion (hemotransfusion reactions and hemotransfusion complications).

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5. Methods/technologies of learning and teaching:

- Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies: Work in a procedural room, oral questioning, solving situational problems, modeling a situation, analysis and discussion of 1-2 clinical cases.


7. Literature (primary and secondary): indicated in the syllabus

8. Control: (tests, situational tasks included)

1. *Who discovered the blood group and the Rh factor?*
2. *Who first transfused animal blood to humans?*
3. *How are blood groups determined with standard serum and with standard erythrocytes?*
4. *Determine the Rh factor using a simple and express method*
5. *Conduct tests for individual compatibility and compatibility by Rh factor.*
6. *Conduct tests for biological compatibility.*
7. *List the sources of blood.*
8. *What is the mechanism of action of transfused blood?*
9. *What methods of blood transfusion do you know?*
10. *What indications and contraindications for blood transfusion do you know?*
11. *What complications do you know that occur during blood transfusion?*

Test questions:

1. Blood transfusion is contraindicated in
 - a. severe liver and kidney dysfunction
 - b. acute anemia
 - c. purulent intoxication
 - d. leukemia
 - e. bleeding
2. Intra-arterial blood transfusion is performed under a pressure of ... mm Hg.
 - a. 200
 - b. 100
 - c. 50
 - d. 300
 - e. 80
3. To determine the blood group, standard serums are used, the agglutinin titer of which must be equal to at least:
 - a. 1:32
 - b. 1:64
 - c. 1:128
 - d. 1:256
 - e. 1: 5
4. Blood stabilized in 6% sodium citrate solution is suitable for transfusion for a maximum of:
 - a. 10 days
 - b. 21 days
 - c. 14 days
 - d. 5 days
 - e. 1 day
5. A previous illness ... is a contraindication to donation.
 - a. viral hepatitis
 - b. congenital hip dislocation
 - c. strabismus
 - d. clubfoot

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- e. hypertension stage I - II
6. Blood transfusion is absolutely contraindicated in the following cases:
- active tuberculosis
 - iron deficiency anemia
 - hemophilia
 - cystitis
 - influenza
7. Blood reinfusion should not be performed after an injury for more than
- 4 hours
 - 2 hours
 - 6 hours
 - 3 days
 - 12 hours
8. To prevent citrate shock, it is necessary to administer the following drug:
- 10% calcium chloride
 - 4% potassium chloride solution
 - 10% gelatin solution
 - 0.5% novocaine
 - 5% Vit C
9. To determine the group affiliation, use:
- standard serums of groups I, II, III
 - universal monoclonal antigen A
 - universal anti-Rhesus serum
 - erythrocytes of groups I and II
 - serum of a patient of groups I-III
10. Blood unsuitable for transfusion:
- hemolyzed
 - canned
 - freshly prepared
 - with a shelf life of more than 7 days
 - freshly frozen


Situational task:

A patient with a duodenal ulcer complicated by bleeding was admitted to the surgical department. The BCC deficit is 35%. An emergency blood transfusion is indicated to compensate for the blood loss. What is the minimum necessary laboratory tests (samples) that should be performed, without which blood transfusion is unacceptable?

1. Topic № 3. General and local anesthesia.

2. Goal: To consolidate and expand students' knowledge of general anesthesiology issues. To teach how to identify indications and contraindications for various types of anesthesia, individually select the type of anesthesia and anesthetic drug. To correctly administer premedication. To teach how to recognize the degrees of anesthesia and promptly provide resuscitation assistance to the patient in case of various complications. To familiarize students with the methods of mask and intubation anesthesia and its effect on the body. To familiarize students with the types of local anesthesia and novocaine blockades, to teach the technique of local anesthesia, to provide assistance in case of complications. To master the basic methods of local anesthesia.

- **3. Learning objectives:**
- *The student should know:*

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- • Clinical stages of anesthesia
- • Methods of general anesthesia
- • Theories of anesthesia
- • Actions of narcotic substances
- • Complications of anesthesia
- • Types of local anesthesia;
- • Indications and contraindications for local anesthesia;
- • Complications of local anesthesia.

The student should be able to:

- • Prepare the patient for anesthesia
- • Select instruments for anesthesia
- • Master the technique of intubation
- • Prepare the anesthesia machine for general anesthesia
- • Technique of infiltration anesthesia;
- • Technique of blockades.

4. Main questions of the topic:

- History of anesthesiology.
- • Concept and types of general anesthesia.
- • Theory of anesthesia
- • Methods and methods of inhalation anesthesia
- • Types of inhalation agents
- • Stages of the clinical course of anesthesia
- • Indications and contraindications for various types of anesthesia
- • Neuroleptanalgesia.
- • Intravenous anesthesia.
- • Anesthesia machines.
- • Complications of anesthesia.
- • Concept and types of local anesthesia;
- • Indications and contraindications for local anesthesia;
- • Novocaine blockade.

5. Methods/technologies of learning and teaching:


- Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies Work on dummies, mannequins and other care items, oral questioning, solving situational problems, modeling the situation, analysis and discussion of 1-2 clinical cases.

7. Literature (primary and secondary): indicated in the syllabus

8. Control: (tests, situational tasks included)


1. Who and in what year first discovered anesthesia?
2. What types of anesthesia do you know?
3. What advantages and disadvantages of the type of anesthesia do you know?
4. What indications and contraindications for anesthesia do you know?
5. How and when is premedication performed?
6. How is mask and intubation anesthesia performed?
7. Explain the theory of anesthesia.
8. Explain the methods and methods of inhalation anesthesia.
9. List inhalation agents and give their characteristics.

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10. Explain the stages of the clinical course of anesthesia.
11. Explain the rule for administering intravenous anesthesia.
12. What are the complications of anesthesia?
13. What types of local anesthesia do you know?
14. What are the indications and contraindications for local anesthesia?
15. How is Vishnevsky's infiltration anesthesia performed?
16. Describe spinal and epidural anesthesia and describe the technique.
17. What is a novocaine blockade, how is it different from local anesthesia?
18. List the indications for novocaine blocks..

Test questions:

1. An electric knife is not used for anesthesia:
 - a. ethyl chloride
 - b. nitrous oxide with oxygen
 - c. nitrous oxide
 - d. fluoroethane
 - e. cyclopropane
2. Ether anesthesia was first used by:
 - a. Morton
 - b. Larrey
 - c. Wells
 - d. Ambroise Pare
 - e. Avicenna
3. Cold for pain relief was first used by:
 - a. Inozemtsev
 - b. Karavaev
 - c. Avicenna
 - d. Wells
 - e. Pirogov N.I.
4. Methods of rapid induction of anesthesia, bypassing the excitation phase, are
 - a. basic anesthesia
 - b. subcutaneous anesthesia
 - c. inhalation anesthesia
 - d. neutroleptanalgesia
 - e. induction anesthesia
5. Necessary conditions for intubation:
 - a. hyperventilation
 - b. complete muscle relaxation
 - c. unconsciousness
 - d. presence of a gastric tube
 - e. exclusion of aspiration of gastric contents
6. A drug used for traditional premedication:
 - a. promedol, fentanyl
 - b. hexinal, sodium thiopental
 - c. metacin, cardiamine
 - d. strophanthin, corilicon
 - e. calcium gluconate, calcium chloride
7. In case of hemotransfusion shock, novocaine block is performed:
 - a. paranephric

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- b. vago-sympathetic
 - c. according to L.G.Shkolnikov
 - d. case block
 - e. intra-abdominal splanchnic nerves
8. Cold for pain relief was first used by:
- a. Avicenna
 - b. Karavaev
 - c. Inozemtsev
 - d. Wells
 - e. Pirogov N.I.
9. Conduction anesthesia is used:
- a. 1 - 2% novocaine
 - b. 0.25% novocaine
 - c. 0.5% novocaine
 - d. analgin e. nitrous oxide
10. Anesthetic used most often for local anesthesia:
- a. novocaine
 - b. trimecaine
 - c. lidocaine
 - d. sovcaine
 - e. cocaine

Situational task:

1. A victim with an extensive wound to the left thigh and severe bleeding was admitted to the surgical department. It is necessary to intervene immediately and stop the bleeding.

How should the surgeon anesthetize the wound?

2. A 68-year-old female patient has a lacerated wound measuring 1.5 x 8.0 cm on the inner surface of the lower third of her right leg with necrotic edges, bleeding, and soreness around the wound. The wound was treated with an alcohol solution, dried, and anesthetized with a 0.5% novocaine solution on the inner surface of the wound.

What mistake did the surgeon miss?

1. Topic № 4. Acute local surgical infection. Sepsis

2. Goal: To familiarize students with the features, types of surgical infection, demonstrate patients with purulent infections (furuncle, carbuncle, abscess, phlegmon, lymphadenitis, panaritium, mastitis, paraproctitis, erysipelas, etc.). To teach the diagnosis of purulent infection, methods of surgical treatment. To familiarize with the prevention of purulent infections.

3. Learning objectives:


the student must know:

- • Etiology and pathogenesis of purulent infection
- • Dangers and complications of purulent infection
- • Prevention of purulent infection
- • Complex treatment of purulent infection

the student must be able to:

- • Percussion, palpation, auscultation.
- • Skin treatment, surgical wound.
- • Local anesthesia

4. Main questions of the topic:

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- Etiology, pathogenesis of purulent infection
- Classification, pathological and anatomical picture of purulent infections
- Clinical course
- Diagnostics, differential diagnostics
- Basic principles of treatment of acute purulent infection, conservative, surgical treatment
- Use of antibiotics

5. Methods/technologies of learning and teaching:

- Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies Work at the patient's bedside, oral questioning, solving situational problems, modeling the situation; analysis and discussion of 1-2 clinical cases.

7. Literature (primary and additional): the syllabus indicates

8. Control: (tests, situational tasks included)

1. *1. What types of surgical infections do you know?*
2. *2. What relative signs of various surgical inflammatory diseases do you know?*
3. *3. What diagnostic manipulations performed in surgical infectious and inflammatory diseases do you know?*
4. *4. What preventive measures performed to prevent surgical infections do you know?*
5. *5. What features of care for patients with surgical infectious and inflammatory diseases do you know?*
6. *6. What applies to surgical treatment of purulent-inflammatory diseases?*
7. *7. What can complicate surgical infections?*
8. *8. What are the basic principles of treatment of acute purulent infection?*

Test questions:

1. Signs that are not typical for phlegmon:

1. the presence of a cavity with pus surrounded by a capsule
2. increased body temperature
3. local pain
4. local hyperemia of the skin
5. painful infiltrate with softening in the center

2. Superficial purulent thrombophlebitis is not characterized by:


1. intermittent claudication
2. limb edema
3. formation of blood clots along the veins
4. body temperature 37-37.5
5. cyanosis of the skin

3. In case of an abscess, the following treatment is indicated:

1. urgent surgery - opening and drainage of the abscess cavity
2. urgent hospitalization of the patient, establishment of vigilant observation of the patient
3. prescription of adequate nutrition to raise the protective immune-biological forces of the body
4. before the formation of a purulent cavity, conservative treatment, antibiotic therapy
5. with a small accumulation pus, a puncture is performed with suction of pus and introduction of antibiotics

4. Diagnosis of purulent pleurisy is determined by

1. pleural puncture - we get pus in a syringe
2. auscultation - weakening of breath sounds in the lung on the side of the disease
3. percussion - dullness of percussion sound
4. chest fluoroscopy - increased enlightenment of the lung tissue
5. palpation - absence of vocal fremitus

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5. It is possible to transfer the course of wet gangrene to dry by:
1. under general anesthesia, make "lampas" incisions and dressings with ointment, UFO
 2. prevention and control of infection
 3. improving blood circulation in limb tissues
 4. UHF wounds
 5. alcohol dressings
6. The source of surgical sepsis cannot be:
1. closed fracture
 2. deep burn
 3. wound
 4. facial carbuncle
 5. peritonitis
7. The clinical classification of sepsis does not include the type:
1. traumatic
 2. acute
 3. fulminant
 4. recurrent
 5. cryptogenic
8. Therapeutic measures that cannot be recommended for sepsis:
1. restriction of fluid and hypertonic solutions
 2. opening of the purulent focus
 3. administration of antibiotics
 4. blood transfusion
 5. vitamin therapy
9. The most important in the treatment of sepsis is:
1. elimination of the primary focus
 2. strict bed rest
 3. careful collection of anamnesis
 4. treatment of concomitant disease
 5. identification of a hereditary factor
10. Less typical for sepsis:
1. anuria
 2. tachycardia
 3. leukocytosis
 4. increased body temperature
 5. presence of a purulent focus

Situational task:

A 9-year-old boy was admitted to the emergency room of the hospital with complaints of pain in the right leg. He has been ill for 2 weeks. He was treated at home. His condition worsened, so he was sent for inpatient treatment.

Body temperature in the evenings is up to 40 C. Single scattered dry and wet wheezing is heard in the lungs. The liver and spleen are not enlarged. Edema and hyperemia of the skin in the lower third of the right thigh, sharp pain are determined. The knee joint is enlarged in volume, the leg is half-bent in it, movements are painful. It was also established that 3 weeks ago he hit his right thigh on the desk.

What is your diagnosis? What studies need to be done in the emergency room? Your treatment tactics?

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1. Topic № 5. Open mechanical damage.

2. Goal: to give students the basic concepts of injuries, open mechanical damage, wounds. To consolidate and expand knowledge on general issues of injuries, open mechanical damage, wounds. To teach students to prepare a patient for various manipulations with various types of injuries, to provide first aid for injuries, open mechanical damage, wounds. To familiarize with complications developing with various types of injuries, open mechanical damage, wounds.

3. Learning objectives:

The student must know:

- • Nature of the wound, stop bleeding
- • Course of the wound process
- • Wound infection
- • Wound healing, dangers of wounds

The student must be able to:

- • First aid for wounds
- • PXO of wounds
- • Washing of purulent wounds
- • Treatment of the surgical field

4. Main questions of the topic:

- Types of open mechanical injuries;
- Distinctive clinical signs of a cut wound;
- Distinctive clinical signs of a stab wound;
- Distinctive clinical signs of a chopped wound;
- Distinctive clinical signs of a bite wound;
- Distinctive clinical signs of a gunshot wound;
- Distinctive clinical signs of a lacerated wound;
- Distinctive clinical signs of a crushed wound;
- Distinctive clinical signs of a poisoned wound;
- Diagnostics and differential diagnostics of open mechanical injuries, wounds;
- First aid skills for open mechanical injuries, wounds;
- Modern approach to complex treatment of various types of open mechanical injuries, wounds.

5. Methods/technologies of learning and teaching:

- Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.


6. Assessment methods/technologies Work at the patient's bedside, on dummies, mannequins and other care items, oral questioning, solving situational problems, modeling the situation; analysis and discussion of 1-2 clinical cases.

7. Literature (primary and secondary): indicated in the syllabus


8. Control: (tests, situational tasks included)

- 1) *What are wounds?*
- 2) *What is the clinical picture?*
- 3) *How are wounds classified?*
- 4) *What is a wound infection?*
- 5) *How does the wound process proceed?*
- 6) *What is the first phase of the wound process?*
- 7) *What is the second phase of the wound process?*
- 8) *What types of wound healing exist?*

Test questions:

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1. A fresh wound is not characterized by:
 1. muscle twitching
 2. pain
 3. bleeding
 4. wound gaping
 5. gaping, bleeding
2. The intensity of pain in a wound depends on:
 1. the size of the wounding projectile and the speed
 2. the number of nerve elements in the area of damage
 3. the neuropsychic state of the victim
 4. the speed of injury
 5. the sharpness of the wounding projectile
3. A through wound with a small entrance and large exit holes is observed when wounded by:
 1. a bullet at close range
 2. a Finnish knife
 3. a bayonet
 4. a fragment
 5. a sword
4. According to infection, wounds are divided into:
 1. purulent, freshly infected, aseptic
 2. cut, aseptic, poisoned
 3. aseptic, scalped, purulent
 4. chopped, fresh infected, aseptic
 5. clean, fresh infected, contaminated
5. A penetrating abdominal wound is a wound with damage to:
 1. parietal peritoneum
 2. skin
 3. muscles
 4. aponeurosis
 5. subcutaneous fat
6. The degree of gaping of the wound is determined by:
 1. the direction of the elastic fibers of the skin, muscles and tendons
 2. the depth of damage
 3. damage to the nerve trunks
 4. damage to the fascia
 5. damage to the muscles and tendons
7. A wound that heals faster than others:
 1. cut
 2. chopped
 3. bitten
 4. bruised
 5. crushed
8. Many factors contribute to the development of infection in a wound, excluding:
 1. shock
 2. hematoma
 3. blood loss
 4. foreign bodies
 5. exhaustion, vitamin deficiency, etc.

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9. In developed granulations, 6 layers are distinguished, of which the fourth is:

1. maturing
2. leukocyte-necrotic
3. vertical vessels
4. horizontal fibroblasts
5. vascular loops

10. In a gunshot wound, all zones of damage are distinguished, except for the zone of

1. inflammation
2. wound channel
3. molecular concussion
4. primary necrosis
5. hemorrhage

Situational task:

As a result of falling from a tree and hitting a hard object, the victim developed an irregularly shaped wound measuring 5x8 cm with rough edges on the outer surface of the middle third of the left leg. Muscle scraps with moderate bleeding on two wounds.

What type of wound does this wound belong to and what complications are possible during the process?

1. Topic № 6. Closed mechanical damage. Desmurgy. Transportation.

2. Goal: each students the techniques of performing transport immobilization for various closed injuries, mechanical damage, bruises, sprains, dislocations, fractures. Provide first aid for closed mechanical injuries, bruises, sprains, dislocations, fractures. Teach students to analyze and argue the patient's condition. Learn the rules for applying soft bandages. Learn the basic requirements for dressings. Master the technical skills of applying soft, hard bandages and an individual dressing package.

3. Learning objectives:

The student must know:


- • The concept of trauma
- • Clinical course of fractures and dislocations
- • Prediction of severity
- • Local and surgical treatment.
- • Rules for applying a bandage;
- • Types of soft bandages;
- • Determining the quality of a bandage.

The student must be able to:

- • Determining the type of fractures
- • First aid for injuries
- • Administration of painkillers and cardiac drugs.
- • Conducting PXO of the wound.
- • Apply a bandage to the head;
- • Apply a bandage to one and both eyes;
- • Apply a sling bandage;
- • Apply a circular, spica, spiral bandage;
- • Apply a bandage to the chest, mammary gland;
- • Apply a bandage to the perineum;
- • Apply a DESO bandage.

4. Main questions of the topic:

- • Concept of fractures

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- • Classification of fractures
- • Determining the severity of a fracture
- • Clinical course
- • Diagnosis of fractures and dislocations
- • First aid
- • Local and surgical treatment
- • Anatomy - physiological features of the body;
- • Concept of desmurgy;
- • Types of bandages, soft and hard;
- • Technique of applying a bandage.

5. Methods/technologies of learning and teaching:

- • Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies Work at the patient's bedside, on dummies, mannequins and other care items, oral questioning, solving situational problems, modeling the situation; analysis and discussion of 1-2 clinical cases, demonstration and interpretation of radiographs, etc.

7. Literature (primary and secondary): indicated in the syllabus

8. Control: (tests, situational tasks included)

1. *What types of closed mechanical injuries do you know?*
2. *What distinctive clinical signs of fractures do you know?*
3. *What studies conducted in diagnostics and differential diagnostics of various types of closed mechanical injuries do you know?*
4. *What is the scope of first aid for closed mechanical injuries?*
5. *What features of transport immobilization for various types of closed mechanical injuries do you know?*
6. *What is the tactics of complex treatment of bruises, sprains, dislocations and fractures?*
7. *What is desmurgy?*
8. *What are the rules for bandaging?*
9. *List the types of bandages.*
10. *What spiral bandages do you know?*
11. *How is the Hippocratic bandage and cap applied and what is the difference?*
12. *How is a bandage applied to the nose and chin?*
13. *For what injuries is the Desault and Velpeau bandage applied?*
14. *Show the technique of applying a bandage to the mammary gland.*

Test questions:


1. The most common dislocation is:

1. shoulder
2. lower jaw
3. clavicle
4. hip
5. ankle

2. According to the etiology, the following are not considered dislocations:


1. complete dislocation
2. traumatic
3. habitual
4. congenital
5. pathological

3. The most common congenital dislocation is:

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1. hip
2. shoulder
3. forearm
4. wrist
5. proximal phalanx of the 1st finger
4. The following is applied to the scrotum:
 1. suspensory bandage
 2. cruciform bandage
 3. recurring bandage
 4. spica bandage
 5. Velpeau bandage
5. A bandage called circular:
 1. subsequent rounds completely cover the previous ones
 2. subsequent rounds cover the previous ones slightly 3/4
 3. subsequent rounds cover the previous ones by 1/2
 4. subsequent rounds are separated from the previous ones by the width of the bandage
 5. subsequent rounds do not cover the previous ones
6. An occlusive dressing is used for:
 1. open pneumothorax
 2. hip fractures
 3. capillary bleeding
 4. venous bleeding
 5. arterial bleeding
7. After surgery for hip fractures, a ... plaster cast is applied.
 1. fenestrated
 2. splint
 3. circular
 4. splint-circular
 5. corset
8. The main reasons for the displacement of bone fragments in fractures:
 1. spastic muscle contraction
 2. damage to the joint capsule
 3. combination with osteomyelitis
 4. muscle damage
 5. tendon damage
9. Reposition of bone fragments are:
 1. one-stage
 2. delayed
 3. late
 4. early
 5. temporary
10. Immobilization of bone fragments in the correct position is carried out by the method of:
 1. plaster cast
 2. skeletal traction
 3. orthopedic shoes
 4. bandaging
 5. transport splints

Situational task:

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1. During examination of a patient at the scene of an accident, the ambulance doctor found a fracture of the right femur. He applied a transport splint and delivered the patient to the trauma department.

Did the doctor do everything?

2. A 34-year-old man with a cut wound on the palmar surface of the middle third of his right forearm was delivered to the emergency room. According to the victim, the wound was inflicted with a knife by an unknown person on the street 1.5 hours ago. The wound was cleaned and primary stitches were applied. The nurse secured the dressing on the wound with a bandage, tying the ends of the bandage in a knot over the wound. After that, she injected the patient subcutaneously with 0.5 ml of tetanus toxoid and 3000 IU of antitetanus serum.

What mistake was made in the technique of applying the bandage?

1. Topic № 7. Surgical operation. Pre and postoperative periods.

2. Goal: Teach students to instrumental examination of patients, prepare patients for surgery for various diseases requiring surgical treatment. Explain the dangers of surgery. Show the operating position, approaches to surgery.

3. Learning objectives:

the student must know:

- concept of surgery,
- types and stages of surgery,
- indications and contraindications for surgery,
- preliminary preparation of the patient for surgery

The student must be able to:

- • treatment of the surgical field and the surgeon's hands
- • transportation rules
- • selection of surgical instruments
- • percussion, palpation, auscultation

4. Main questions of the topic:

- concept of surgery
- types and stages of surgery
- indications and contraindications for surgery,
- preparation of organs and systems
- surgical position
- surgical access reception

5. Methods/technologies of learning and teaching:


- • Discussion of the topic of the lesson, solving situational problems, acquiring practical skills.

6. Assessment methods/technologies Work at the patient's bedside, oral questioning, solving situational problems, modeling the situation; analysis and discussion of 1-2 clinical cases.

7. Literature (primary and secondary): indicated in the syllabus

8. Control: (tests, situational tasks included)

1. 1. Give a definition of surgery.
2. 2. Determine the urgency of the surgery.
3. 3. What types of surgery exist?
4. 4. What is the difference between radical surgery and polyactive surgery?
5. 5. What are typical and atypical surgeries?
6. 6. Show the operating positions?

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7. 7. *How is preoperative preparation of the patient for planned surgeries performed?*

8. 8. *How is preoperative preparation of the patient for emergency surgeries performed?*

9. 9. *What indications and contraindications do you know for urgent surgeries?*

Тестовые вопросы:

1. Emergency surgery is not performed in the following cases:
 - a. dry gangrene
 - b. non-specific gangrene
 - c. wet gangrene
 - d. specific gangrene
 - e. diabetic gangrene
2. Preoperative preparation for appendectomy does not include:
 - a. cleansing enema
 - b. premedication
 - c. shaving the hair in the surgical field
 - d. psychological preparation
 - e. emptying the bladder
3. The following do not contribute to the development of thromboembolic complications in the postoperative period:
 - a. wound pain
 - b. bleeding
 - c. hematoma
 - d. infiltrate
 - e. eventration
4. The following do not contribute to the divergence of the wound edges after laparotomy:
 - a. massive infusion therapy
 - b. high intra-abdominal pressure
 - c. hematoma
 - d. wound suppuration
 - e. insufficient strong suturing of the aponeurosis
5. In case of flatulence after surgery, the following is not indicated:
 - a. drug stimulation of intestinal peristalsis
 - b. insertion of a gas outlet tube into the anus
 - c. administration of antispasmodics
 - d. gastric lavage
 - e. hypertonic enema
6. Early pulmonary complications of the postoperative period include:
 - a. asphyxia
 - b. pneumonia
 - c. atelectasis
 - d. bronchiectasis
 - e. bronchitis
7. In case of acute urinary retention in the postoperative period, the following is not performed:
 - a. administration of diuretics
 - b. paranephric novocaine block
 - c. catheterization of the bladder
 - d. application of an epicystostomy
 - e. administration of antispasmodics
8. Non-existent stages in the general procedure for performing an operation:

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- a. recovery from anesthesia
 - b. surgical position (laying)
 - c. treatment of the surgical field and anesthesia
 - d. surgical access and surgical admission
 - e. completion of the operation
9. The doctor's tactics in case of urinary retention in the postoperative period:
- a. urine drainage with a catheter
 - b. puncture of the bladder
 - c. paranephric novocaine block, kidney diathermy
 - d. heating pad on the bladder
 - e. emptying the rectum with an enema
10. To clarify the diagnosis with suspected peritonitis, it is necessary to perform ...
- a. urgent laparoscopy
 - b. clinical blood and urine tests
 - c. re-examination of the patient after 1 hour
 - d. general fluoroscopy of the abdominal organs
 - e. ultrasound of the abdominal organs

Situational task:

Patient M., 75 years old, turned blue 15 minutes after surgery for acute appendicitis under general anesthesia. Breathing is rare and intermittent. What complication of the early postoperative period developed in the patient? What are your actions?