

**MINISTRY OF HEALTH OF UKRAINE
ODESA NATIONAL MEDICAL UNIVERSITY**

Faculty Medical №1

Department of simulation medical technologies

CONFIRMED by

Vice-rector for scientific and pedagogical work

Eduard BURYACHKIVSKY

September 1, 2023

**METHODICAL RECOMENDATION FOR
INDIVIDUAL WORK OF HIGHER EDUCATION ACQUISITIONS IN THE ACADEMIC
DISCIPLINE**

**«EMERGENCY CONDITIONS IN SURGERY. PRACTICAL SKILLS. SIMULATION
TRAINING»**

Faculty, course: International, 6 year

Educational Discipline: Emergency conditions in surgery. Practical skills. Simulation training

Approved:

The methodical recommendation was approved at the meeting of the department of simulation
medical technologies
Protocol No. 1 of 28.08.2023

Head of the department  Oleksandr ROGACHEVSKYI
(signature)

Authors:

head of the department Oleksandr ROGACHEVSKYI
assistant of professor Olha YEHORENKO
associate professor, PhD Mykhailo PERVAK
associate professor, PhD Vasyl GLADCHUK
associate professor, PhD Yuriy PETROVSKIY
assistant of professor Viacheslav ONYSHCHENKO
assistant of professor Dmytro KARAKONSTANTYN
assistant of professor Svitlana TRISHCHENKO
assistant of professor Hennadii CHEREMNYKH
assistant of professor Andrii DOBROVOLSKYI

Topic 1. The concept of "acute abdomen" in surgical practice

Topic: The concept of "acute abdomen" in surgical practice .

Goal: Learn to distinguish the concept of "acute abdomen" in surgical practice.

Basic concepts: acute abdomen, laparotomy , laparoscopy .

Plan

1. Theoretical questions for the lesson:

1. Surgery 2018 Medical business | Online test - "On Lesson" (naurok.com.ua)

2. Questions for self-control:

1. To analyze the causes of "acute stomach".
2. Explain the mechanism of development and pathogenesis of emergency conditions.
3. Name the risk factors for the development of "acute abdomen".
4. Analysis of laboratory and instrumental examination methods.
5. Compile the algorithm of the doctor's actions in the diagnosis of "acute abdomen".

3. Indicative tasks for processing the theoretical material:

1. The concept of "acute stomach".
2. Etiology and pathogenesis of "acute abdomen".
3. Diagnosis of "acute abdomen".
4. Treatment tactics of "acute stomach".

II. Test tasks for self-control:

1. A 48-year-old patient after 1.5 hours, with arousal esophagus due to cicatricial stricture, felt a sharp pain in the stomach. Previously, he had duodenal ulcer disease. During the examination: the abdomen is sharply tense, painful; Ps - 110/min. Painful swallowing of saliva. Pallor of skin coverings . What is the most likely diagnosis?

- A. Perforation of the abdominal part of the esophagus
- B. Acute myocardial infarction
- C. Pinching of the diaphragmatic hernia
- D. Perforation of duodenal ulcer
- E. Thrombosis of mesenteric vessels

2. On the third day after the operation for appendicular disseminated peritonitis, a 48-year-old patient developed abdominal distension; no pain; there are no gases, peristalsis is not heard. What is the most likely cause of this condition?

- A. Paralytic intestinal obstruction
- B. Stangulation intestinal obstruction
- C. Thrombosis of mesenteric vessels
- D. Abscess of the abdominal cavity
- E. Pilephlebitis

3. A patient with a suspected rupture of the spleen was brought to the reception department of the surgical hospital. Which of the research methods listed below will provide the most likely

information to confirm the diagnosis?

- A. Laparocentesis
- B. Overview roentgenoscopy of the organs of the abdominal cavity
- C. Pneumoperitoneum
- D. Ultrasound
- E. General blood test

4. Patient A., 38 years old, was hospitalized in the surgical department with acute abdominal pain with radiation to the lower back, vomiting. A paracentesis was performed, a liquid with a high content of enzymes was obtained. What disease can be suspected in the first place?

- A. Acute pancreatitis
- B. Renal colic
- C. Acute enterocolitis
- D. Perforating stomach ulcer
- E. Acute appendicitis

5. A 45-year-old patient complains of girdling pain in the epigastrium, repeated vomiting, abdominal distension, and diarrhea. He became acutely ill after eating spicy and fatty food. R - 112 in 1 min. BP – 110/70 mm. Hg. The abdomen is distended, painful in the epigastrium, in the right and left hypochondrium (i. In the umbilical area, point hemorrhages are determined. The symptom of Blumberg - Schiotkin is doubtful. Positive symptoms of Mayo- Robson, Voskresensky. Lake - 11.8 *10⁹/l., rod nuclei - 11 %, urinary diastasis – 1024 units. The most likely diagnosis?

- A. Acute pancreatitis
- B. Acute cholecystitis
- C. Acute intestinal obstruction
- D. Acute peritonitis
- E. Acute appendicitis

7. List of recommended literature (main, additional, electronic information resources):

Main:

1. Surgery: a textbook in two volumes / R. O. Sabadyshin [etc.]. - Vinnytsia: New book, 2018 - T.2. Special surgery. - 2018. - 592 p.: tables, illustrations. ISBN 978-966-382-706-3 (P.244-247)
2. Surgery: textbook / Ya. S. Bereznytskyi, O. V. Bilov, L. S. Bilyanskyi, etc.; under the editorship Ya. S. Bereznytskyi. — Vinnytsia: Nova Kniga, 2020. — 528 p. ISBN 978-966-382-834-3 (P.40-41)

Additional:

1. "Acute stomach" and abdominal pain in the practice of a general practitioner — family medicine. V. B. Goshchynskyi, L. S. Babinets, B. O. Migenko, I. O. Borovyk, V. M. Tvorko, S. S. Ryabokon / FAMILY MEDICINE No. 2 (76)/2018.- P.22

Electronic information resources:

1. <https://gmka.org/uk/category/dlya-medykiv/nevidkladna-hirugiya/> - Global Alliance for Medical Knowledge

2. <https://zsz.pp.ua/nozhove-poranennya-v-zhivit-infikovana-rana-peredno-cherevno-stinki-kod-za-mkx-10/> – [Knife wound to the stomach: infected wound of the front abdominal wall, code according to MKX -10](#)

Topic 2 The concept of "acute stomach" in pregnant women

Topic: The concept of "acute abdomen" in surgical practice in pregnant women

Goal: To learn to distinguish the concept of "acute abdomen" in surgical practice in pregnant women

Basic concepts: acute abdomen, laparotomy , laparoscopy , pregnancy

Plan

2. Theoretical questions for the lesson:

1. Acute abdomen in gynecology: symptoms, diagnosis, emergency care, modern treatment tactics — UA Magazine Ukraine

2. Questions for self-control:

1. To analyze the causes of "acute abdomen" in pregnant women.
2. To explain the mechanism of development and pathogenesis of emergency conditions in pregnant women.
3. Name the risk factors for the development of "acute abdomen".
4. Classification of the causes of emergency conditions in gynecological patients.
5. Analysis of laboratory and instrumental examination methods.
6. Compile the doctor's algorithm for diagnosing "acute abdomen" in pregnant women.

3. Indicative tasks for processing the theoretical material:

7. The concept of "acute stomach".
8. Etiology and pathogenesis of "acute abdomen" in pregnant women
9. Diagnosis of "acute abdomen" in pregnant women
10. Treatment tactics of "acute abdomen" in pregnant women

1. A 40-year-old woman notices a gradually increasing pain in the right iliac region that began in the epigastric region for 3 days . Temperature up to 37.5-37.8°C. During the examination: the tongue is wet, Ps - 80/min., the abdomen is soft on palpation , moderately painful in the right pubic area, where it is vaguely palpated some kind of work In the blood: leuk . - $12 \cdot 10^9/l$. What pathology should be considered?

A. Appendicular infiltrate

- B. Tumor of the cecum
- C. Twisted ovarian cyst
- D. Ectopic pregnancy
- E. Appendicular abscess

2. For the clinic of disturbed tubal pregnancy according to the type of tubal abortion, the following is characteristic:

- A. All the listed symptoms
- B. Paroxysmal pains
- C. Bloody discharge from the genital tract
- D. Periodic dizziness
- E. Absence of chorionic elements during histological examination in the presence of a decidual reaction in the oedometrium

3. At the 12th week of pregnancy, the pregnant woman's body temperature rose to 38.0 C, chills, tachycardia appeared, pain in the abdomen, purulent secretions from the genital tract appeared in the lower back. In the mirrors, the cervical canal is open, there is discharge from the pharynx with an unpleasant smell. During bimanual examination, the body of the uterus is enlarged up to 12 weeks of pregnancy, and is painful during palpation. Attachments are not enlarged. What is the most likely diagnosis?

- A. Thrombophlebitis
- B. Infected miscarriage
- C. Acute gestational pyelonephritis
- D. Endometritis
- E. Peritonitis

4. What is characteristic of pregnant women with "acute abdomen" in the 2nd-3rd trimester of pregnancy?

- A. Pronounced abdominal pain
- B. Violent clinical picture
- C. Fluctuating symptoms, unexpressed pain
- D. Pronounced symptoms of peritoneal irritation

5. Why pregnant women in the 2nd-3rd trimester do not have pronounced symptoms of peritoneal irritation:

- A. Immunodeficiency state
- B. Enlarged uterus
- C. A pregnant uterus reduces the mobility of the cap
- D. Weakness of the muscles of the anterior abdominal wall

4. List of recommended literature (main, additional, electronic information resources) :

Main:

1. Surgery: a textbook in two volumes / R. O. Sabydshin [etc.]. - Vinnytsia: New book, 2018 - Volume 2. Special surgery. - 2018. - 592 p.: tables, illustrations . ISBN 978-966-382-706-3
2. Surgery: textbook / Ya. S. Bereznytskyi , O. V. Bilov , L. S. Bilyanskyi , etc.; under the editorship Ya. S. Bereznytskyi . — Vinnytsia: Nova Kniga, 2020. — 528 p. ISBN 978-966-382-834-3

Additional:

1. "Acute stomach" and abdominal pain in the practice of a general practitioner — family medicine. V. B. Goshchynskyi , L. S. Babinets , B. O. Migenko , I. O. Borovyk, V. M. Tvorko , S. S. Ryabokon / FAMILY MEDICINE No. 2 (76)/2018.- P.22

Electronic information resources:

1. <https://gmka.org/uk/category/dlya-medykiv/nevidkladna-hirurgiya/> - Global Alliance for Medical Knowledge

Topic 3. Tactics of a medical specialist at the Medical Center

Goal: To learn the tactics of a general practitioner — family medicine for gastrointestinal bleeding.

Basic concepts: Diagnosis and assistance in gastrointestinal bleeding .

Plan

1. Theoretical questions for the lesson:

1. Surgeon : Standards and clinical protocols for the provision of medical care in the specialty "surgery" (Order No. 297 dated 02.04.2010): Standards for the organization of medical care for patients with acute gastrointestinal bleeding | Medical reference books of the "Health of Ukraine Library" series (dovidnyk.org)

2. Questions for self-control:

- 1 Etiology and pathogenesis of SCC;
- 2 Methods of examination of patients with SCC;
- 3 Classification of SKK;
- 4 ShKK Clinic;
- 5 Differential diagnosis of SCC;
- 6 The treatment tactics of the doctor of the ZPSM at ShKK.

3. Indicative tasks for processing the theoretical material:

Etiology and pathogenesis of SCC;
 Methods of examination of patients with SCC;
 Classification of SKK;
 ShKK Clinic;

4. Test tasks for self-control:

1. What instrumental are investigations carried out primarily based on the clinical picture of bleeding from the upper gastrointestinal tract?

A. Esophagogastroduodenoscopy

B. Colonoscopy

S. Survey radiography of the OCP

D. _ Ultrasound of the OCP

2. What is a mechanical stoppage of bleeding from varicose veins of the esophagus ?

A. Installation of the obturator probe Blackemore - Sangstaken

V. Consecration nasogastric tube

C. Performing an endoscopic examination

D. _ Carrying out a shunt operation

3. A 35-year-old patient suffering from duodenal ulcer noted that he had developed weakness and dizziness in the last day, and in the morning, after getting out of bed, he lost consciousness. The patient is pale, there is pain in the epigastrium, there are no symptoms of irritation of the peritoneum. What complication of ulcer disease did you suspect?

A. _ Ulcerative bleeding

B. _ Perforation of the ulcer

C. _ Penetration of the ulcer

D. _ Ulcer malignancy

E. Stenosis

4. A 68-year-old patient complains of dull pain in the abdomen, weight loss, weakness, constipation bordering on liquid stool, a lot of dark blood in the stool. Objectively: the skin is earthy, dry. When palpating the abdomen in the right iliac region, there is an infiltrate of 6x9 cm, which is almost non-displaceable. Blood Hb is 68 g/l. What is the most likely pathology that can cause such a picture?

A. _ Tumor of the cecum, intestinal bleeding

B. _ Diverticular disease complicated by bleeding

C. _ Crohn's disease complicated by bleeding

D. _ Polyposis of the colon, complicated by bleeding

E. Nonspecific ulcerative colitis complicated by bleeding

5. A 38-year-old patient was admitted to the surgical department with a clinical carina of ulcer bleeding. This bleeding is his third in the last year. After using a number of conservative means with endoscopic coagulation, Hb rose from 60 to 108 g/l. The general condition improved, but after 2-3 hours, vomiting of blood occurred again, Hb dropped to 68 g/l. What are your tactics in the treatment of this patient?

A. _ Immediate operation

B. _ Operative treatment after 24 hours

C. _ Operative treatment in the distant term

D. Endoscopic hemostasis

E. Conservative treatment

5. List of recommended literature (main, additional, electronic information resources) :

Main:

1. Surgery: textbook / O.Yu. Usenko, G.V. Bilous, G.Y. Putintseva . - 5th edition. - K.: VSV "Medicine", 2021. - 416 p.

Surgical diseases (textbook) — P.D. Fomin, Ya.S. Bereznytskyi , Ya.S. Bereznytskyi , O.A. Viltsanyuk , M.D. Zheliba et al., - K.: VSV "Medicine", 2017

Additional:

1. Emergency situations in surgery (study guide) — L.M. Kovalchuk, K.M. Bobak , A.I. Bobak , V.V. Kyretiv et al., 2017

Electronic information resources:

1. <https://zakon.rada.gov.ua/laws/show/z0356-22#n42> - Order of the Ministry of Health of Ukraine No. 441 dated 09.03.2022 "On approval of procedures for providing pre-medical assistance to persons in emergency situations "
<https://gmka.org/uk/category/dlya-medykiv/nevidkladna-hirurgiya/> - Global Alliance for Medical Knowledge