

Signature

MINISTRY OF HEALTH OF UKRAINE.
ODESSA NATIONAL MEDICAL UNIVERSITY.
Medical faculty
Department of infectious diseases



APPROVED
Vice-rector on scientific and pedagogical work.
Eduard BURIACHKIVSKYI
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STUDENT'S GUIDELINES
on study discipline:

International faculty, 4th year
Infectious diseases
Content module 4

Approved:

Meeting of the Department of Infectious Diseases

Odessa National Medical University

Protocol No. 1 of "29" 08. 2024

Head of the Department of Infectious Diseases



Tetiana CHABAN

Teacher(s)

Chaban T.V. PhD. Doctor of Sciences, professor, head of the department.

Associate professors: candidate of medical science Usychenko K.M., Pavlenko

O.V., Gerasymenko O.A., N.V. Movlyanova

Assistants: Bocharov V.M., Verba N.V.

Practical class No. 7

Topic № 13: "Quarantine infections" - 2 hours

Goal:

Improve students' knowledge of etiology, epidemiology, pathogenesis, clinical manifestations of quarantine infections, prevalence in different regions of the world and different age groups, statistical data on morbidity, mortality, frequency of complications, remote consequences; to develop professional skills in drawing up an examination plan (laboratory and instrumental), a comprehensive plan for the treatment of the patient and the necessary preventive measures.

Basic concepts: especially dangerous infections (EDI), yellow fever, cholera, plague, highly contagious hemorrhagic fevers of Lassa, Ebola, Marburg

Equipment: illustrative material, tables, thematic patients

Plan:

1. There are organizational activities (greetings, verification of those present, announcement of the topic, purpose of the class, motivation of applicants of higher education to study the topic).
2. Control of the reference level of knowledge is carried out by the method of frontal survey. To control the reference level of knowledge with a student of higher education must know the answers to the questions.
 - The general characteristic of EDI?
 - The source of infection in EDI.
 - Ways of transmission EDI.
 - Pathogenicity factors of EDI pathogens.
 - Cholera etiology, epidemiology
 - Source of infection in cholera.
 - Routes and main factors of cholera transmission.
 - The duration of the incubation period of cholera
 - Key symptoms of cholera.
 - Degrees of dehydration.
 - Clinical classification of cholera.
 - Consequences of cholera..
 - Complications of cholera.
 - Clinical manifestations of dehydration shock.
 - Plan of examination of a patient suspected of cholera.
 - Methods of specific diagnosis of cholera.
 - Indications for etiotropic therapy of cholera. Drugs, doses, route of administration, duration of appointment.

- Pathogenetic treatment of cholera.
 - Rules for discharging a cholera patient from a hospital.
 - Antigenic structure of the causative agent of the plague.
 - Plague carriers.
 - Stages of plague pathogenesis.
 - Local changes in the bubonic form of the plague.
 - Clinical forms of the plague and their features.
 - Clinical manifestations of disorders of the nervous system in plague.
 - Clinical manifestations of damage to the respiratory organs in the pulmonary form of the plague.
 - Clinical manifestations of the cutaneous form of plague.
 - Causes of death in plague.
 - Hemogram with plague.
 - Methods of specific diagnosis of plague.
 - Conditions for prescribing a blood culture for plague.
 - Etiotropic therapy of plague. Drugs, their doses, routes of administration.
 - Specific prevention of plague.
 - Emergency prevention of plague.
 - Rules for discharging a plague patient from a hospital.
 - Organizational tactics of a doctor when plague is suspected
 - The concept of diseases regulated by international sanitary regulations.
 - Etiology of highly contagious hemorrhagic fevers of Lassa, Ebola, Marburg, pathogenicity factors of the causative agent.
 - Pathogenesis of highly contagious hemorrhagic fevers of Lassa, Ebola, and Marburg.
 - Clinical manifestations of highly contagious hemorrhagic fevers of Lassa, Ebola, Marburg.
 - Principles of clinical diagnosis and differential diagnosis.
 - Principles of treatment of contagious hemorrhagic fevers of Lassa, Ebola, Marburg.
 - Principles of prevention of contagious hemorrhagic fevers of Lassa, Ebola, Marburg.
3. Formation of professional abilities and skills (mastery of skills, conducting curation, determining the treatment scheme, conducting laboratory research, etc.):

Recommendations (instructions) for performing tasks

The student must:

- collect complaints, life history and disease history, epidemiological history, conduct a survey of organs and systems;
- conduct a physical examination of a patient with EDI and determine the main symptoms of the disease;

- prescribe a complex of laboratory and instrumental studies of a patient with EDI and analyze the results obtained;
- carry out differential diagnosis and justify the clinical diagnosis of EDI patients;
- to determine the tactics of providing emergency medical care in case of emergency conditions in a patient with EDI;
- to create a comprehensive plan for the treatment of a patient with EDI based on a preliminary clinical diagnosis, observing relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
- determine preventive measures;
- draw up the patient's medical documentation;
- to make a report on the results of the examination of a patient with EDI by a team of students in the study group, an analysis under the guidance of the teacher of the correctness of establishing the diagnosis, differential diagnosis, the scope of the prescribed examination, treatment tactics, assessment of the prognosis and work capacity.

Materials for the final stage of the practical class

Situational task 1

A 32-year-old patient, previously healthy, after a business trip to the Mykolaiv region. in the summer: profuse diarrhea (up to 20 times a day), general weakness, dizziness. At the end of the first day of the disease, the stools became watery, yellow, and then in the form of rice broth without fecal odor, on the second day, vomiting joined without prior nausea. During examination: body temperature 36.5 0C, heart rate 90/min., blood pressure 90/60 mmHg, skin turgor is reduced, voice hoarse, facial features sharpened, cheeks inflamed, tonic cramps in the calves.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Situational task 2

A 5-year-old boy, who had just returned from the south, after eating champignons, had frequent profuse, watery, cloudy-white stools with flakes. The child's consciousness is not clouded, the body temperature is subfebrile, the tongue and mucous membranes are dry, palpation of the abdomen is not painful, there is gurgling and rumbling in the epigastrium.

1. Preliminary diagnosis.
2. Examination plan.
3. Treatment plan.

Situational task 3

Patient Ch., 42 years old, was admitted to the infectious disease department on the 2nd day of illness with complaints of chills, body temperature rising to 40°C, myalgia, headache, weakness, pain in the right groin area, thirst. He works as an exterminator, the last time he carried out extermination was 3 days before the illness. Objectively: the condition is severe, body temperature 40°C, blood pressure 80/40, Ps 124 per minute, arrhythmic. He is conscious, but answers questions sluggishly. Hyperemia of the face, dryness of the mucous membranes is determined. Heart tones are sharply muffled, percussive expansion of heart boundaries. Vesicular breathing is weakened in the lungs, there are no wheezes. The liver and spleen are not enlarged. In the inguinal area on the right, a node with a diameter of up to 10 cm was found, sharply painful on palpation, without clear boundaries, the skin above it was reddened with a cyanotic shade. Other lymph nodes are not enlarged, there is no rash on the body. In the blood: L- $18 \times 10^9/l$, ESR – 54 mm/h, Hb-122g/l, P-24%, C-60%, L-15%, M-1%.

1. Clinical diagnosis.
2. Examination plan.
3. Treatment.

Situational task 4

Patient K., 32 years old, a doctor, hospitalized in the infectious disease department on the first day of illness with complaints of an increase in body temperature up to 40°C, chills, headache, cutting pain in the chest when breathing deeply, shortness of breath, cough with the release of a large amount of foamy sputum. On the day of his illness, he returned from India, where he worked in a hospital during a business trip. Objectively: the condition is extremely difficult. Body temperature 41.4°C, blood pressure 60/40 mm Hg. art., Ps 130 per min., ChD 38 per min. Breathing is shallow, rhythmic. Inhibited, does not answer questions. There is no rash on the skin, the face is hyperemic, scleritis. The cough is intense with the release of a large amount of bloody sputum. Heart sounds are sharply muffled. In the lungs, breathing is weakened, there are numerous wet rales over both lungs. Does not respond to abdominal palpation. Liver, spleen without features. There are no meningeal signs. In the blood: L- $20 \times 10^9/l$, Hb-98g/l, ESR-40 mm/h.

1. Clinical diagnosis.
2. Examination plan.
3. Treatment.

4. Summary:

There are evaluation of the students, summing up, announcement of the topic of the next practical class.

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

Main:

1. Infectious diseases: Підручник для мед. ун-тів, інст., акад. Затверджено МОН і МОЗ / Голубовська О.А., Андрейчин М.А., Шкурба А.В.; за ред. О.А. Голубоської. К.: ВСВ «Медицина», 2018. –с. 407-417.
2. CDC Yellow Book 2018: Health Information for International Travel \ Edited by Brunette Gary W Kozarsky Phyllis. Oxford University Press, 2017. 704 pp.

Additional:

1. Harrison's Principles of internal medicine. 19th edition /edited by Anthony S. Fauci, Dennis L Kasper, Dan L. Longo [et all]. – New York. - 2017. – P. 876-898.
2. Comprehensive Textbook of Infectious Disease : M. I. Sahadulla, S. A. Udman. – 2nd edition. Jaypee Brothers, Medical Publishers Pvt. Limited, 2019 – 835 p.
3. Recognition and diagnosis of infectious diseases / Посібник для англomовних студентів медичних вузів. М. Kryzhanska, О. Zubach, О. Vorozhbyt // – Львів: ЛНМУ, 2018. – 95 с.

Electronic information resources:

1. www.who.int- World Health Organization
2. www.ama-assn.org– American Medical Association /American Medical Association
3. www.dec.gov.ua/mtd/home/- State Expert Center of the Ministry of Health of Ukraine
4. <http://bma.org.uk>– British Medical Association
5. www.gmc-uk.org- General Medical Council (GMC)
6. www.bundesaerztekammer.de– German Medical Association
7. <https://library.odmu.edu.ua/catalog/>- Electronic catalog

The criteria of evaluation of the students on practical class

rating	criteria of evaluation
Excellent "5"	The student is fluent in the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data, expresses his opinion on the topic of the class, demonstrates clinical thinking.
Good "4"	The applicant has a good command of the material, participates in the discussion and solution of a situational clinical problem, demonstrates practical skills during the examination of a patient and the interpretation of clinical, laboratory and instrumental research data with some errors, expresses his opinion on the topic of the class, demonstrates clinical thinking.
Satisfactory "3"	The acquirer does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, demonstrates practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data with significant errors.
Unsatisfactory "2"	The acquirer does not possess the material, does not participate in the discussion and solution of the situational clinical problem, does not demonstrate practical skills during the examination of the patient and the interpretation of clinical, laboratory and instrumental research data.