

Station “Infection diseases”

CLINICAL SCENARIO 1

The condition of the patient is extremely severe. He fell ill 6 hours ago, when frequent watery stool without pathological admixtures developed, then vomiting joined. At the examination: the eyes are deeply sunken in the orbits, the skin is pale, cyanotic, wrinkled. The voice is hoarse, quiet. The tongue is dry. Cramps are of the upper and lower extremities. Dyspnea. Blood pressure is not determined. Anuria. The abdomen is retracted. The temperature is 35.5 ° C.

Task:

1. Clinical diagnosis.
2. Evaluate the degree of dehydration according to WHO classification
3. Laboratory diagnostics.
4. Treatment

5. CLINICAL SCENARIO 1

Preliminary diagnosis:
Cholera
Evaluation of the degree of dehydration:
III degree of dehydration according to WHO classification
Laboratory tests:
CBC
Hematocrit
Electrolytes of the blood
Bacterioscopic examination of the feces
Bacteriologic examination of the feces
Treatment:
Rehydration with saline solutions
I/v stream injection of Treesolt solution
Etiotropic therapy: doxycycline

CLINICAL SCENARIO 2

The patient of 30 years old was admitted to the infectious hospital on the 9th day of the disease. Objectively: the condition of the patient is severe. The skin is pale. The tongue is coated by white fur. The peripheral lymphatic nodules are not palpated. The pulse rate is 72 beats per minute, rhythmical. Heart sounds are muffled. The abdomen is soft, painless on palpation. Hepatosplenomegaly. There are four pale roseolae on the skin of the abdomen. Stool is absent for 3 days.

Task:

1. Clinical diagnosis.
2. What are materials for research and methods of the laboratory diagnostics for confirmation of diagnosis?
3. What etiotropic therapy should be administered?

4. CLINICAL SCENARIO 2

Preliminary diagnosis:
Typhoid fever
Materials for research:
Blood
Laboratory diagnostics
CBC
Bacteriologic methods, culture of blood on a bile broth.
RIHA, IFA
Treatment:
Chloramphenicol
0.5g×5 times per day till second day of the normal temperature
Then 0.5g×4 times per day till 10-th day of the normal temperature.

CLINICAL SCENARIO 3

The patient of 35 years old complains of headache, increase of the

temperature up to 39°C, pain in calf muscles. The onset of the disease is an acute 6 days ago with high temperature, chill, headache, nasal bleeding. It was established that the patient went to fishing 2 weeks ago. Objectively: the condition of the patient is severe. The dermal integuments and sclerae are icteric. There are injection of sclerae and hemorrhagic rash on the skin. The pulse rate is 100 beats per minute, rhythmical. The arterial pressure is 110/70 mm Hg. Heart sounds are muffled. Hepatomegaly. A quantity of urine decreased to 300 ml per day.

Task:

1. What is the preliminary diagnosis?
2. Laboratory diagnostics
3. What etiologic and pathogenetic therapy should be administered?

CLINICAL SCENARIO 3

Leptospirosis
Laboratory diagnostics:
CBC
CUC
The direct microscopy of the urine in dark field
RIGA, CFR
Biochemical tests: bilirubin, AlAT, AsAT, urea, creatinine
Treatment:
Benzipenicillin
2 million units 6 times per day (q4h) till second day of normal temperature
Ddesintoxicative therapy, hemostatic remedies
Glucocorticoids

CLINICAL SCENARIO 4

The 28 years old school teacher fell ill 7 days ago, when weakness, anorexia,

fever, cough developed. The temperature decreased on the 3rd day, nausea and periodical vomiting joined. Urine became dark on the 5th day, jaundice developed. The woman was in contact with three schoolchildren who developed jaundice. Objectively: the condition of the patient is mild severe. The temperature is 36.6°C. The dermal integuments and sclerae are icteric. The peripheral lymphatic nodules are no palpated. The pulse rate is 70 beats per minute, rhythmical. The abdomen is soft, painless on palpation. The liver is below rib arch by 3 cm, painless. The spleen is no palpated. Stool is acholic. Urine is dark.

Task:

1. What is the preliminary diagnosis?
2. What biochemical and serological researches are necessary to perform for confirmation of diagnosis?
3. What are the main principles of the therapy of this disease?

CLINICAL SCENARIO 4

Preliminary diagnosis:
Acute hepatitis A
Methods of investigation:
CBC
CUC
AlAT, AsAT
Total bilirubin
Alkaline phosphatase, γ -GTP
Thymol test
IFA, aHAV IgM
Abdominal ultrasaund investigation
Treatment:
Regime, diet
Desintoxicative therapy

CLINICAL SCENARIO 5

The nurse of the surgical department was admitted to the infectious hospital with complaints of nausea, vomiting, general weakness, subfebrile temperature, pain in the joints. The disease began near 3 weeks. Jaundice of sclerae and dark urine developed 2 days ago. Objectively: the condition of the patient is mild severe. Jaundice of the skin and sclerae is marked. The rash is absent. The peripheral lymphatic nodules are no palpated. The pulse rate is 78 beats per minute, rhythmical. The lungs are without peculiarities. The liver is below rib arch by 3 cm. The spleen is no palpated. Urine is dark. Stool is acholic.

Task:

1. What is the preliminary diagnosis?
2. Methods of laboratory investigation.
3. What is the specific prophylaxis of the disease?

CLINICAL SCENARIO 5

Preliminary diagnosis:
Acute hepatitis B
Methods of laboratory investigation:
AlAT, AsAT
Total bilirubin
Alkaline phosphatase, γ -GTP
Thymol test
HBsAg, HBeAg
aHBc IgM
PCR ДNA HBV
Abdominal ultrasound investigation
Prophylaxis:
Vaccination

CLINICAL SCENARIO 6

The patient of 25 years old fell ill acutely 2 days ago. The complaints of the patient are: increasing of the temperature up to 38.5°C with chill, severe headache, mainly in the area of the forehead, marked pain in the movements of eyeballs, dry cough. Objectively: the condition of the patient is mild severe. Hyperemia of the face and conjunctiva, granular enanthema and punctate hemorrhages are on the soft palate. The pulse rate is 80 beats per minute, rhythmical. Heart sounds are muffled. On percussion of the lungs a clear sound is determined. The respiration is harsh. The rales are absent. Meningeal signs are not determined.

Tasks:

1. What is the preliminary diagnosis?
2. What is the etiotropic therapy of this disease?
3. What are possible complications of the disease?
4. Laboratory diagnostics.
5. Prophylaxis

6. CLINICAL SCENARIO 6

Preliminary diagnosis:
Influenza
Etiotropic treatment::
Inhibitors of neuraminidase
Oseltamivirum 0,75 g 2 times per day
Complications:
Pneumonia
Hemorrhagic edema of the lungs
Edema of the brain
Miocarditis
Diagnostics:
Rapid tests for express diagnostic
Prophylaxis:
Vaccination

CLINICAL SCENARIO 7

A woman of 40 years old complains of moderate pain in the throat, increase of the temperature up to 38°C. She fell ill 2 days ago. Objectively: the patient is inert, hardly answers the questions. The dermal integuments are pale. The rash is absent. The moderate hyperemia of the mucous membrane of the stomatopharynx with cyanotic tint is marked. The tonsils are edematous. There is a film-like coat on the left tonsil, it is taken out hardly. The neck lymphatic nodules are enlarged, moderately dense, lightly painful. Heart sounds are muffled. The liver and spleen are not palpated. Diuresis is preserved.

Tasks:

1. What is the preliminary diagnosis?
2. Methods of diagnostics.
3. What is the main method of the treatment?
4. Specific prophylaxis.

5. CLINICAL SCENARIO 7

Preliminary diagnosis:
Diphtheria of tonsils
Localized film-like
Methods of diagnostics:
CBC
Bacterioscopic method
Bacteriologic method
RDHA, PCR
ECG
Treatment:
Specific treatment – antitoxic antidiphtheric serum
Nonspecific treatment - antibiotics
Specific prophylaxis:
Vaccination

CLINICAL SCENARIO 8

The patient of 30 years old was admitted to the infections hospital in severe condition. He fell ill acutely with chill, the temperature 39.5°C, headache and pain in the muscles. The temperature decreased suddenly. The decrease of the temperature was accompanied by sweating. The repeated increase of the temperature was marked in a day with chill. Epidemiological anamnesis: the patient works as mechanic of the ship. At the last time attended countries of Eastern Africa. Objectively: the patient is inert. Jaundice of the skin. The peripheral lymphatic nodules are no palpated. The pulse rate is 84 beats per minute, rhythmical. The abdomen is soft, painless on palpation. Hepatosplenomegaly.

Tasks:

1. What is the preliminary diagnosis?
2. Methods of investigation and treatment.
3. Specific prophylaxis of this disease, it's duration.

CLINICAL SCENARIO 8

Preliminary diagnosis:
Malaria
Laboratory diagnostic:
CBC
Thin smear of the blood
Thick drop of the blood
Treatment:
Etiotropic therapy: antimalaria drugs
Specific prophylaxis: chemoprophylaxis with antimalaria drugs
1 week before and all period of staying in endemic area

CLINICAL SCENARIO 9

The disease developed acutely 2 days ago with the pain in the epigastric area, watery stool 2 times a day without pathological admixtures, vomiting developed. At the next day the patient marked decrease of the vision, doubling in his eyes (diplopia), thirst, dryness in the mouth. The day before he took homemade canned mushrooms. Objectively: the condition of the patient is severe. The dermal integuments are pale. The tongue is dry. There is disorder of swallows, the pupils are widen. The reaction to the light is weak. The pulse rate is 54 beats per minute. The abdomen is inflated, slightly painful in the epigastria area on palpation. Constipation.

Tasks:

1. What is the preliminary diagnosis?
2. What are the main syndromes occurred in the patient?
3. Methods of diagnostic.
4. Stages of treatment.
5. Features of injection of specific drugs.

6. CLINICAL SCENARIO 9

Preliminary diagnosis:
Botulism
Methods of investigation:
Biological method
The main syndromes:
Intoxication, ophthalmoplegia, bulbar syndrome
Treatment:
First stage: lavage of the stomach with 5% solution of Na hydrocarbonate in volume to 10 liters; syphonic enemas.
Second stage: injection of polyvalent antitoxic antitobulinic serum
Third stage - desintoxication
Features of injection of specific drugs.
Injection of polyvalent antitoxic antitobulinic serum by Bezredka's method

CLINICAL SCENARIO 10

A student of 20 years old was admitted to the infectious hospital with complaints of increase of the temperature up to 39°C, pain in the left iliac area, fluid stool up to 20 times a day, scanty with admixtures of the mucus and fibers of blood, tenesmus. 2 days before he drank unboiled milk bought at the market. Objectively: the condition of the patient is mild severe. The dermal integuments are pale. The rash is absent. The tongue is moist, coated by white fur. The stomach is soft, painful in the left iliac area. Spastic, painful and dense sigmoid is palpated. Diuresis is preserved.

Tasks:

1. What is the preliminary diagnosis?
2. Complications of the disease.
3. What methods of the laboratory diagnostics are necessary to use for confirmation of diagnosis, materials for investigation.
4. What etiotropic and pathogenetic therapy should be administered?

CLINICAL SCENARIO 10

Preliminary diagnosis:
Shigellosis
Complications:
Infectious-toxic shock
Intestinal bleeding
Perforation and peritonitis
Methods of investigation:
CBC
Coprogram
Bacteriological investigation of feaces
RIGA, RA
Treatment:
Etiotropic treatment: antibacterial drugs
Pathogenetic treatment: desintoxication, hemostatics

