

INSTRUCTION
for 4th year students of medical faculty
Infectious Diseases:

PLAN

Name of the section (topic)	Number of class hours
	practical
1. General questions of infectology. Typhoid fever. Paratyphoid A and B	5
2. Bacterial intestinal infections	6
3. Foodborne toxicoinfection. Botulism. Viral intestinal infections. Protozoal intestinal infections	6
4. Bacterial neuroinfection. Viral neuroinfection	6
5. Enteral viral hepatitis. Parenteral viral hepatitis	6
6. Complications and outcome of viral hepatitis. Leptospirosis. Brucellosis	6
Total hours	35

Requirements for preparing of students

The student must know:

- basic concepts of infectology;
- classification, etiology, pathogenesis, clinical picture, diagnostic methods and differential diagnosis of infectious diseases;
- diagnostic methods, emergency medical care and medical tactics in conditions that threaten the patient's life;
- methods for the prevention and treatment of the most common infectious diseases in adult patients;
- medical tactics for the provision of medical care for especially dangerous, massive, infectious diseases.

The student must be able to:

- communicate with the patient based on an assessment of his psychological and personal characteristics, individual response to the disease;
- examine a patient with an infectious disease (examination, percussion, palpation, auscultation);

- conduct differential diagnosis between various infectious diseases, as well as infectious diseases with pathological conditions of non-infectious genesis;
- plan an additional examination of a patient with an infectious disease;
- take into account the advice of medical specialists to establish a final clinical diagnosis;
- organize the collection of infectious material from patients with infectious diseases;
- provide primary health care for typical cases of infectious diseases;
- organize work with quarantine and especially dangerous infections;
- provide emergency medical care in case of hepatic, anaphylactic, hypovolemic and infectious toxic shock, acute cardiovascular failure, acute respiratory failure, asphyxia with stenosis of the larynx.

Practical skills:

- methodology for assessing the severity of the condition of a patient with an infectious disease;
- methodology for determining the nature of the rash;
- methodology for calculating the volume of fluid for the first stage of patient rehydration;
- methods of sampling pathological material.

CONTENT OF EDUCATIONAL MATERIAL

1. General questions of infectology. Typhoid fever. Paratyphoid A and B.

General features of infectious diseases. The principles of diagnosis, treatment and prevention of infectious diseases.

The device and the epidemic regime of the infectious diseases hospital. The concept of boxing, semi-boxing, ward. Indications for admission in an infectious diseases hospital.

Fever of unknown origin. The principle of organizing a diagnostic search in long-term febrile patients.

Typhoid fever. Paratyphoid A and B. Etiology. Epidemiology. Pathogenesis. Clinic. Complications Diagnostics. Differential diagnosis. Treatment. Prevention.

2. Bacterial intestinal infections.

Pathogenetic types of infectious diarrhea: agents, pathogenesis, clinical manifestations. Principles of etiotropic therapy of intestinal infections and invasions. Rehydration therapy: concept, types, principles of implementation. Pathogenetic therapy of intestinal infections. Probiotics: definition, role in the prevention and treatment of intestinal infections and invasions.

Salmonellosis: epidemiology, etiology, pathogenesis, clinical presentation, complications, diagnosis, differential diagnosis, treatment, prevention.

Shigellosis: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Cholera: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention. Emergency medical care for hypovolemic shock.

Escherichiosis: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

3. Foodborne toxicoinfection. Botulism. Viral intestinal infections. Protozoal intestinal infections.

Foodborne intoxications: epidemiology, etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment, prevention.

Botulism: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Enterovirus infection. Etiology. Epidemiology. Pathogenesis. Clinic. Diagnostics. Differential diagnosis. Treatment. Prevention.

Rotavirus and norovirus infections: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Protozoal intestinal infections. Amoebiasis: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

4 . Bacterial neuroinfection. Viral neuroinfection.

Viral neuroinfection. Rabies: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, prevention.

Bacterial neuroinfection. Meningococcal infection: epidemiology, classification, etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment, prevention.

Differential diagnosis of diseases that occur with damage to the central nervous system.

The main clinical syndromes of damage to the central nervous system: meningeal syndrome, encephalitic syndrome, intracranial hypertension syndrome. The most common causes of central nervous system lesions, clinical manifestations, diagnostic methods, principles of differential diagnosis.

Analysis and interpretation of liquorograms: differential diagnosis of meningism, aseptic, purulent and tuberculosis meningitis, subarachnoid hemorrhage and traumatic lumbar puncture.

5. Enteral viral hepatitis. Parenteral viral hepatitis

Enteral viral hepatitis

Acute viral hepatitis: epidemiology, current classification, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Parenteral Viral Hepatitis

Acute viral hepatitis: epidemiology, current classification, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Chronic viral hepatitis: epidemiology, modern classification, etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, treatment, prevention.

6. Complications and outcome of viral hepatitis. Leptospirosis. Brucellosis

Acute and chronic liver failure: concept, causes, clinical picture, diagnosis, differential diagnosis, treatment, prevention.

Virus-associated cirrhosis of the liver: epidemiology, current classification, etiology, pathogenesis, clinical picture, diagnosis, differential diagnosis, complications, treatment, prevention.

Hepatocellular carcinoma: clinical presentation, diagnosis, differential diagnosis, treatment principles.

Leptospirosis: epidemiology, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

Brucellosis: epidemiology, classification, etiology, pathogenesis, clinical presentation, diagnosis, differential diagnosis, treatment, prevention.

INFORMATION AND METHODOLOGICAL PART

Literature

MAIN:

- Harrison's Infectious Diseases. 3rd Edition / D.Kasper, A.Fauci. – McGraw-Hill Education, 2016. – 1328p.
- Mandell, Douglas, and Bennett's Principles and Practice of Infectious Diseases / J.E.Bennett, R.Dolin, M.J.Blaser: 9th ed. – Elsevier, 2019 – 19913p.

MORE:

- Atlas of Human Infectious Diseases / H.F.L.Wertheim, P.Horby, J.P.Woodall. - Wiley-Blackwell, 2012. - 304p.
- Oxford Textbook of Infectious Disease Control. A Geographical Analysis from Medieval Quarantine to Global Eradication / A.Cliff, M.Smallman-Raynor. – Oxford, 2013 – 208p.
- Evidence-Based Infectious Diseases (Evidence-Based Medicine). 3rd Edition / D.Mertz, F.Smaill, N.Daneman. - Wiley-Blackwell, 2018. – 320 p.
- Lecture Material.

ELECTRONIC DATABASES

- Oxford Medicine Online [Electronic resource] / Oxford University Press. - Access mode: www.oxfordmedicine.com . - Date of access: 04.04.2019 .
- Springer Link [Electronic resource] / Springer International Publishing AG. - Access mode: <https://link.springer.com> . - Date of access: 04.04.2019 .

Tasks for self education

1.	Clostridioides difficile infection
2.	Nosocomial salmonellosis
3.	Antibiotic-associated diarrhea
4.	Lyme disease
5.	Specific diagnosis of viral hepatitis