

SPECIFIC CHARACTERISTICS OF TEACHING THE SCIENCE OF PARASITOLOGY IN MEDICAL UNIVERSITIES

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Abstract

The article provides information about the methods used in the teaching of the parasitology department at medical universities. It is emphasized that situational examples and independent works have a special place in strengthening students' knowledge. Emphasis is placed on the diagnosis and prevention of parasitic diseases using various forms of traditional and interactive hands-on training.

Keywords: parasitology, situational issues, independent work, helminth, infection, diagnostics.

Introduction

"Medical biology" has its own characteristics of teaching in medical universities. In the teaching of "Medical Biology" teaching methods are used, such as working with a textbook, preparing a synopsis of assignments, and oral narration of a thematic assignment for practical training by students. At the same time, there are other teaching methods, such as examination of preparations under a microscope, study of tables, use of handouts (micro- and macropreparations), working of tests in the module, slide-show material for better mastering of the material, independent work as well as students' performance of tasks in the workbook.

In medical universities, the "parasitology" section begins in the 2nd semester after mastering the light microscopy skills obtained as a result of studying the "Fundamentals of Genetics" section in the first year of study.

In the general parasitology program, students study the following: systematics of the parasite, its geographical distribution, structural features, development periods of pathogens, ways of human infection, pathogenic effects of parasites, methods of parasite diagnosis, prevention. Solving situational issues related to the topic helps to strengthen the student's knowledge of the subject of the lesson and increase interest.

Such a coherent medical program forms a medical direction in future doctors and helps to develop creative abilities for independent activities. It is of great importance for students to work on the scientific-referential messages presented during the lesson. A prerequisite for the educational process is the proper organization of independent work, which is carried out in two forms:



- classes in the auditorium (solving tests and situational problems);
- independent works outside the audience.

In non-auditory work, students are offered topics that are sufficiently detailed in the educational materials for independent study on the platform. In the workbook, the student fills in the diagnostic features of the parasite for each individual topic. In addition, students study the structure of parasites under a microscope. They analyze the reproduction cycle of parasites. In the practical lessons, as one of the forms of interactive education on each topic, situational problems in medical parasitology are included and they are solved individually or in groups. Also included are picture quizzes.

An example of a situational problem: A patient came to the hospital complaining of headache, muscle pain when moving, pain when swallowing, chewing and turning the eyes, sleepiness, temperature and swelling of the bladder and face. The analysis of the patient revealed that he had eaten pork bought from people.

Question: What type of helminthosis can be?

Answer: Trichinellosis.

Question: What laboratory tests should be performed to confirm the diagnosis?

Answer: Detection of larvae by immunological tests or muscle biopsy.

Solving situational problems helps to strengthen the student's knowledge on the subject of the lesson and increase interest. It is recommended to complete the tables on the characteristics of parasites (Table 1):

Table 1. Disease-causing parasites

The Latin name for the parasite	Illness	Ways of transmission	The invasion stage for humans	Localization in the human body	Diagnostics	Prevention

For the successful implementation of the parasitology module, the following activities are carried out (Table 2):

Table 2.

TRADITIONAL AND INTERACTIVE FORMS OF CONTROL

No	<i>Traditional method</i>	<i>Interactive method</i>
1.	Work with the textbook	Oral story
2.	Work with the lecture text	Independent work
3.		Solving situational issues
4.	Write an outline	Identification of micropreparations
5.	Independent work	Dialogue-lecture

In addition, in the final lessons, students are presented with questions on the comparative description of micropreparations from the departments of helminthology and arachnoentomology (Table 3):



Table 3 Questions about micropreparations

No	Helminthology	Arachnoentomology
1	Correct identification of the parasite type and name in the micropreparation	
2	The main diagnostic signs of the given drug	
3	Systematic status (type, class) in Uzbek and Latin	Systematic status (type, subtype, class, category, family) in Uzbek and Latin
4	An organ where helminths are found in the body of the host	I External structural features of Imago: a) the division of the body into joints b) the number of walking legs v) type of oral apparatus g) the presence of wings
5	Life Cycle Stages (Sequential)	Type of postembryonic development (correct and incorrect, complete and incomplete metamorphosis)
6	Hosts of helminths: a) basic b) interval	Importance in medicine

The study of parasitic diseases in medical universities allows doctors to correctly diagnose and treat patients. For this reason, conducting high-quality classes in medical biology and parasitology in medical universities is an urgent requirement of the present time.

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