

**Federal State Budgetary Educational Institution of Higher Education**

**«North-Ossetia State Medical Academy»**

**of the Ministry of Healthcare of the Russian Federation**

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***Guidelines for conducting a practical lesson with 6th year students of  
the Faculty of Medicine on the topic:***

**DIFFERENTIAL DIAGNOSIS IN INTESTINAL DYSPEPSIA  
(the duration of the lesson is 8 hours, the first lesson is 4 hours)**

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**Guidelines for conducting a practical lesson with 6th year students of the Faculty of Medicine on the topic:**

**DIFFERENTIAL DIAGNOSIS IN INTESTINAL DYSPEPSIA**

Purpose of the lesson:

in the process of clinical analysis of the patient, to increase the level (quality) of knowledge and skills of students in the diagnosis (differential diagnosis), the formulation of the diagnosis of inflammatory bowel diseases.

Motivation for the relevance of the topic:

Intestinal diseases are among the most common diseases of the digestive system. Nevertheless, enterology remains a branch of internal medicine little known to practitioners. Until now, many therapists and gastroenterologists diagnose "chronic enteritis" and "chronic colitis" in most patients with non-tumor diseases of the intestine, however, there are no macroscopic and microscopic signs of inflammation of the mucous membrane of the small and large intestines.

Inflammatory diseases of the small and large intestines primarily include acute intestinal infections, but the nosological names of these acute gastroenteritis and colitis are caused by pathogens (dysentery, cholera, staphylococcal gastroenteritis, etc.). Chronic inflammatory diseases of the small intestine include granulomatous enteritis (Crohn's disease), eosinophilic and radiation enteritis. Signs of inflammation are observed in allergic enteropathy, as well as in celiac disease, Whipple's disease, and variable hypogammaglobulinemia. Chronic inflammatory diseases of the colon include ulcerative colitis, granulomatous colitis (Crohn's disease), microscopic and collagenous colitis, ischemic and radiation colitis, and other rare diseases.

Many intestinal diseases are manifested by characteristic symptoms, noticing which, from the very beginning, you can choose the shortest path to diagnosis. Acquaintance with modern functional and instrumental research methods shows how detailed and thorough the final diagnosis can be, which is the key to successful treatment of the patient.

Determining the level of preparation of students:

The second level of knowledge: methods of control - a written survey (20 min). The student must know the essence of the disease, the definition and classification of inflammatory bowel diseases, the etiology and pathogenesis of diseases of the small and large intestines, the main risk factors, the clinical manifestations of the main clinical syndromes - malabsorption and maldigestion, differential diagnosis of inflammatory bowel diseases; the student must be able to - possess propaedeutic skills, independently identify the main pathological syndromes in enterology, make a preliminary diagnosis according to accepted classifications, determine the required amount of research and be able to interpret the data of additional research methods (general blood test, b / x blood test, coprogram, fecal analysis for dysbacteriosis, bacterial culture of feces, results of rectomanoscopy, irrigoscopy, colonoscopy).

Report of student curators in the ward: when reporting a patient, students should pay special attention to the following manifestations of the disease.

"Key complaints": abdominal pain, diarrhea, constipation or alternation of them, bloating, rumbling.

Detailing of the main complaints: pain in the abdomen - localization (diffuse throughout the abdomen, mainly in its middle part, around the navel with enteritis, in the lower lateral parts of the abdomen with colitis), causes, nature, and intensity; accompanying phenomena (impaired intestinal digestion of food - local enteral syndrome and malabsorption in the intestine - symptoms of malabsorption (SMA) - general enteral syndrome: frequent loose stools mixed with mucus and blood, weight loss in chronic enteritis; asthenoneurotic syndrome, manifested by "leaving in disease" in chronic colitis; intestinal dysbacteriosis).

Clarification and detailing of other complaints characteristic of enterocolitis.

Anamnesis of the disease: find out the possible causes of enterocolitis - infection (salmonellosis, proteus, Pseudomonas aeruginosa, campylobacter, etc.), protozoa (giardia, amoeba), worms, gastritis with secretory insufficiency, allergic, drug, radiation effects, chronic ethanol intoxication, enteritis with endocrine diseases (hyperparateriosis, diabetes), tuberculosis. Chronic colitis with uremia, liver failure, gout, etc.

Anamnesis of life: identification of risk factors for enterocolitis - alimentary, past or existing intestinal infections, protozoa, helminthic invasion, chronic stomach diseases with secretory insufficiency of the biliary-pancreatic system, uncontrolled medication (salicylates, antibiotics, digitalis preparations, etc.).

**CLASSIFICATION OF NON-SPECIFIC ULCERATIVE COLITIS**

Течение	Степень тяжести	Распространенность поражения	Активность воспаления (по данным эндоскопии)	Наличие осложнений
Молниеносное	Легкая	Тотальный колит с	Минимальная	Местные

Острое	Средняя	ретроградным	Умеренная	Системные
Хроническое	степень	илеитом или без	Выраженная	
рецидивиру-	тяжести	него		
ющее	Тяжелая	Левосторонний		
Хроническое		колит		
непрерывное		Дистальный колит		
		(проктосигмоидит,		
		проктит)		

Objective status: Pay attention to the color of the skin and mucous membranes, the effects of aphthous stomatitis, the severity of subcutaneous fat. With deep palpation of the abdomen - soreness around the navel and (or) from the lower lateral sections, splashing noise in the region of the caecum, rumbling, swelling, sections of the large intestine in the form of dense painful strands (total or segmental colitis-transversitis; right-sided, left-sided colitis, sigmoiditis, proctosigmoiditis, proctitis).

Additional diagnostic methods:

1st stage of diagnostics - mandatory studies: general analysis of blood, urine, feces; analysis of feces for worm eggs, occult blood, dysbacteriosis; biochemical analyzes (hypo- and dysproteinemia in enteritis) sigmoidoscopy, colonoscopy (if necessary with a biopsy), irrigoscopy.

2nd stage - differential diagnosis of chronic enteritis and enteropathies with clarification of the diagnosis of the underlying disease - chronic colitis and "irritable colon" syndrome (absence of morphological changes in the mucous membrane of the colon), ulcerative colitis (presence of ulcerative necrotic process in the mucous membrane of the colon intestines), Crohn's disease (characteristic x-ray picture - "cobblestone pavement", "cord symptom"), ischemic colitis.

Preliminary diagnosis: on the basis of leading complaints and clinical manifestations, as well as indicators of additional studies, to establish the presence of inflammatory bowel disease in a patient.

Differential Diagnosis:

Due to the fact that the main manifestation of inflammatory bowel diseases are malabsorption and maldigestion syndromes, it is necessary to master the differential diagnosis and be able to prescribe an additional examination in a timely manner in accordance with the recommended standards, which can reliably confirm or exclude the diagnosis.

Differentiation of chronic enteritis and chronic non-ulcerative colitis

Признаки	Chronic enteritis	Chronic non-ulcerative colitis
Stool frequency with diarrhea	Up to 6-8 times a day	Up to 10-15 times a day
Constipation frequency	In 20% of patients	In 50% of patients
Volume of feces	Polyfecalia (more than 300 g per day)	not enlarged or slightly increased
Steatorrhea ("fatty" feces)	typical	Отсутствует
Visible remnants of undigested food in the stool	typical	Not typical
Mucus on the surface of the stool	A small amount of	A lot
Blood in stool	Absent	Happens often
Localization of abdominal pain	Mainly in umbilical region	In the iliac regions and lateral parts of the abdomen
Tenesmus	Absent	typical
Feeling incomplete bowel	Not typical	typical

movements		
weight loss	In most patients, significant	In 1/3 of patients insignificant
Trophic disorders (hair loss, brittle nails, etc.)	typical	Not typical
Soreness at the point Porges	typical	Not typical
Spasm, rumbling, soreness of the terminal ileum	typical	Not typical
Anemia	typical	Not typical
Hypoproteinemia with edema	Characteristic for severe enteritis	Not typical
Palpation tenderness of the colon	Not typical	typical
Splashing noise in the caecum on palpation	typical	Встречается при тифлите
Coprogram	Undigested fiber, starch, muscle fibers	Mucus, leukocytes, intestinal epithelial cells, sometimes red blood cells
Malabsorption disorders of the small intestine	typical	Absent
Colonoscopy	Changes are not typical	Characteristic inflammatory changes in the colon

#### Differential diagnostic differences Crohn's disease and ulcerative colitis

<b>Признаки</b>	<b>Crohn's disease with localization in the large intestine (granulomatous colitis)</b>	<b>non-specific ulcerative colitis</b>
Depth of damage to the intestinal wall	Transmural lesion	The inflammatory process is localized in mucous membrane and in the submucosal layer
Blood in stool	Maybe, but less often than in ulcerative colitis	typical
Rectal injury	Rare (20% of cases)	often
Pathological change around the anal holes	typical	Seldom
External and internal fistulas	typical	Not typical
Determination of a tumor-like formation on palpation of the abdomen (adhesive adhesions of loops)	typical	Not typical

Ileocecal lesion	Very Typical	Not typical
Relapse after surgical treatment	often	not
Endoscopic data: Aphthae	typical	not
Longitudinal ulcers	typical	Not typical
Continuous Defeat	Seldom	Characteristic
Microscopy of intestinal biopsy specimens - the presence of an epithelioid (sarcoid-like) granuloma	typical	Not typical

Clinical diagnosis:

It is formulated according to accepted classifications, indicating the stage, localization, frequency of exacerbations, combined lesions of the small and large intestine.

Conducting classes in a thematic classroom. Analysis of the features of risk factors, pathogenesis and clinic of inflammatory bowel diseases in a particular patient.

The final part of the lesson: control of acquired knowledge - test control.

Summary.