**Bowel diseases: controversial terminology problems and classification**

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In modern gastroenterology, a lot of unresolved and controversial problems have accumulated in the section of intestinal diseases, relating primarily to their terminology and nosological classification.

The problems of nomenclature, terminology and classification of intestinal diseases have not been discussed and solved for more than 25 years. Practical doctors do not know how to correctly identify (diagnose) various diseases of the small and large intestines, and this fact for some reason does not bother anyone. Apparently, they are waiting for foreign gastroenterologists to take up this problem in order to take advantage of already prepared recommendations...

According to our data, the last time classification and nomenclature of bowel diseases were presented in 1985 in the methodological recommendations of A. R. Zlatkina and A. V. Frolkis "Nosological classification of bowel diseases" [4].

Over the past years, domestic enterologists, following in the fairway of foreign authors, have actually abandoned the terms "*chronic enteritis"* and "*chronic colitis",* adopted in the domestic medical literature, which were introduced into clinical practice by one of the leading figures of Russian medicine, V. P. Obraztsov in the distant 1896 [7], and prefer such amorphous terms as *"enteropathy"* and "*colopathy*" [2, 9, 10].

In the manual "*Enterology*" A. Parfenov argues: *"It is necessary to get rid of the erroneous diagnoses of" chronic enteritis "and" chronic colitis, "which do not help to clarify the true nature of bowel diseases"* [10].

Outstanding pathologist of our country V. V. Serov believed that the *term "patia" is a refuge of ignorance and misunderstanding [15*], which is difficult to disagree with. Indeed, the term "patia" comes from the Greek word *pathos*, which means suffering, or disease in general, without specifying the nature of the pathological process: inflammatory, dys- and atrophic or tumor. In this regard, it is unacceptable for use in clinical practice [22].

In the manual for practicing physicians *"Rational pharmacotherapy of diseases of the digestive system"* edited by V. T. Ivashkina [13] in the section on intestinal diseases, there are no mentions of chronic enteritis, and all diseases of

the small intestine are considered only in the aspect of *the syndrome malabsorption which,* as we know, is not a disease entity, as occurs in many diseases of the small intestine. Of chronic colitis in the manual referred to only ischemic, and pseudomembranous microscopy colitis.

It is usually referred to the fact that with chronic enteritis and colitis endoscopically and morphologically (with a histological examination of biopsy specimens of the thick and small intestines), inflammatory changes are expressed indistinctly or absent, and dystrophic-atrophic and disregeneratory processes predominate.

However, this is not new: it has long been known that a chronic inflammatory process in a large intestine is quickly replaced by dystrophy and atrophy, although the inflammatory process is most often determined from the very beginning. It should be remembered that *inflammation is, as a rule, a local typical pathological process in which a combination of both pathological and protective-adaptive reactions takes place* [6].

After the diagnoses of *"chronic enteritis"* and *"chronic colitis"* were questioned and amorphous "*enterocolonies*" began to predominate in diagnosis, journal publications on various bowel diseases, except for ulcerative colitis, Crohn's disease and celiac disease, almost ceased, because there was uncertainty in evaluation of their essence and terminology.

*In the history of studying chronic gastritis (CG)* in its time, you could observe a similar situation.

In 1948, in the monograph of the famous pathomorphologist Y. M. Lazovsky *"Functional morphology of the stomach in the norm and pathology"* [6], the basis for morphological changes in CG were combinations of dystrophic changes in glandular elements, hyperplastic and atrophic processes reflecting the structural rearrangement of the gastric mucosa, but without signs of inflammatory changes. Apparently, there is no reason to doubt the competence of Y. M. Lazovsky as a morphologist.

In connection with the established character of the morphological process in the stomach, the diagnosis of *"CG",* indicating inflammation, was recognized as erroneous and it was suggested to replace it with *"gastrosis*" [5]. Currently, however, believe that the chronic gastritis — is an inflammatory process of gastric mucosa, characterized by lymphoplasmacytic infiltration with admixture of granulocytes pointing to the inflammatory process activity, and signs of the restructuring is considered as a secondary phenomenon, developing as a result of chronic inflammation [19, 21, 23, 33].

In this excursion into the history of CG, we see a definite analogy with the current situation in enterology, which in fact denies the existence of chronic enteritis and colitis as inflammatory bowel diseases [20]. In any case, this problem needs urgent discussion and decision.

Modern enterologists still have to admit that in addition to ulcerative colitis and Crohn's disease, there are other inflammatory bowel diseases: ischemic enteritis and colitis, microscopic colitis (lymphocyte, collagen), pseudomembranous colitis, etc.

In the International Classification of Diseases and Health Problems of the 10th revision (ICD-10, 1995), radiation enteritis and colitis (K52.0), toxic enteritis and colitis (K52.1), alimentary and allergic (hypersensitive) enteritis and colitis (K52.9).

Thus, the problem of chronic enteritis and colitis can't be considered definitively resolved.

*There is a need to develop a modern nosological classification and nomenclature of bowel diseases* [18].

Even at the end of the XX century and is one of the leading domestic entero logs the time A. V. Frolkis in his monograph *"Diseases of the intestines"*, published posthumously [16], proposed his classification of diseases of the small and large intestines (1997).

I. **Diseases of the small intestine** (chronic enteritis — CHE).

*On the etiology:* 1) infectious (postinfection); 2) parasitic; 3) toxic; 4) medicamentous; 5) alimentary; 6) secondary.

*By anatomical and morphological features*:

1. *Localization:* a) chronic jejunitis; b) chronic ileitis; c) chronic total enteritis.
2. *Morphology*: a) jejunitis and ileitis without atrophy (37%); b) with moderate and pronounced partial villous atrophy (50%); c) with subtotal villous atrophy (13%).

*According to the clinical course*: 1) easy flow; 2) of moderate severity; 3) heavy current.

*By the phases:* 1) the phase of exacerbation; 2) the phase of remission.

*By the nature of functional disorders*: 1) with the syndrome of maldigestia; 2) small absorbtsii syndrome; 3) with the syndrome of exscientival enteropathy; 4) with multifunctional enteric insufficiency.

*By the degree of involvement in the pathological process of the large intestine*: 1) with the involvement of the colon in the pathological process

(chronic enterocolitis); 2) without involvement of the large intestine (isolated chronic enteritis).

*By the severity of the bacterial overgrowth syndrome in the small intestine* (small intestinal dysbiosis): 1) with a slight degree (I–II) of small intestinal dysbiosis; 2) with an average and pronounced degree (III–VI).

II. **Diseases of the large intestine** (chronic colitis — CC).

*On etiology*: 1) postinfectious; 2) parasitic; 3) toxic; 4) medicamentous; 5) alimentary; 6) secondary.

*By anatomical and morphological features:*

1. *Localization:* a) left-side CC (sigmoiditis, proctosigmoiditis); b) right-side CC (tiflit, transferzit); c) total colitis (pancolitis).

2. *Morphology:* a) superficial CC; b) diffuse CC; c) atrophic CC.

*According to the clinical course:* 1) easy course; 2) moderate severity; 3) heavy course.

*On phases:* 1) the phase of exacerbation; 2) the phase of remission.

*By the expression of large intestine Dysbacteriosis*: 1) mild dysbacteriosis (I–II); 2) moderate and severe dysbiosis (III–VI).

A. V. Frolkis argued that the *tendency to preserve a number of traditional domestic terms is fully justified* [16]. Another specialist in intestinal diseases I. L. Khalif believed that the diagnoses *"chronic enteritis"* and *"chronic colitis*" should not be rejected — it is only necessary, figuratively speaking, to add to these terms "*surname, name and patronymic"*, for example *"amoebic nondiscriptive colitis* " or *"radiation enteritis and colitis"* (1998).

*In modern enterology, the* famous domestic specialist in intestinal diseases A. I. Parfenov most often uses the terms "*enteropathy*" and "*colopathy*" when referring to diseases of the small and large intestines, although in some cases he also names terms that indicate the inflammatory nature of the disease: *ileitis, ichnitis, enteritis, ileiotilitis, "colitis"* [9], recognizing the possibility of inflammatory bowel disease, in addition to ulcerative colitis and Crohn's disease.

A. I. Parfenov defined the term "*enteropathy " as follows: "Enteropathy is a common name for small intestine diseases of various origins, combined by the development of inflammatory changes in the mucous membrane of the small intestine, often ending atrophy and erosive ulcerative lesions"* [9, 10].

Thus, A. I. Parfenov confirms the initial inflammatory nature of most diseases of the small intestine and considers the atrophic process as a consequence of inflammation of the small intestine mucosa.

Meanwhile, the authoritative modern gastroenterologist — morphologist L. I. Aruin considers the terms *"chronic enteritis*" and *"chronic colitis*" not only "*useless*", but also "*harmful"* [1, 2], but does not in any way substantiate his position. He suggests replacing the diagnoses of "*chronic enteritis*" and "*chronic colitis"* with *"enteropathy"* and *"colopathy"* [1, 2].

According to A. I. Parfenov, there are the following diseases of the small intestine.

I. *Enteritis* (inflammatory diseases), including:

a) infectious and postinfectious; b) toxic;

c) ulcerative-necrotic and others.

II. *Enteropathy of known etiology.*

III. *Enteropathy of unknown etiology* [9, 10].

**I. Enteritis**

1. Infectious gastroenteritis (bacteria, viruses, fungi, parasites).
2. Erosive-ulcer duodenonitis (peptic factor).
3. Tuberculous enteritis — ileotiflit (mycobacterium tuberculosis).
4. Yersiniotic ileitis (Yersinia).
5. Whipple's disease — intestinal lipodystrophy *(Tropheryma Whippelii*).
6. Crohn's disease of the small intestine — regional ileitis (etiology is unknown).
7. Eosinophilic gastroenteritis (etiology is unknown).
8. Idiopathic non-granulomatous jejunoileitis (etiology is unknown).

**II. Enteropathy of known etiology**

1. Gluten enteropathy — gluten intolerance.
2. Tropical sprue (bacterial infection).
3. Antibiotic-associated enteropathy (antibiotics).
4. Allergic enteropathy (food allergy).
5. Toxic enteropathy (heavy metals and other toxins).
6. NSAID-associated enteropathy (NSAIDs).
7. Ischemic enteropathy (arterial and venous ischemia of the small intestine).
8. Radiation enteropathy (radioactive radiation).
9. Enteropathy with uremia (CRF).
10. Post-resection enteropathy (gastrectomy).

**III. Enteropathy of unknown etiology**

1. Autoimmune enteropathy.

2. Collagenic enteropathy.
3. Hypogammaglobulinemic enteropathy.
4. Refractory sprue.

**Main clinical syndromes.** 1. Maldigestia syndrome. 2. Malabsorption syndrome. 3. Chronic diarrhea. 4. Chronic intestinal obstruction. 5. Small intestine bleeding. 6. Syndrome of exudative enteropathy (with chronic loss of protein). *We consider it necessary to add also* 7. Syndrome of microbial overgrowth in the small intestine (small intestine dysbiosis).

**Diseases of the colon** A. I. Parfenov divides into five types.

1. *Inflammatory diseases* (unknown etiology): a) ulcerative colitis; b) Crohn's disease of the colon (granuloma of the colitis).
2. *Other inflammatory diseases of the colon of unknown etiology*: a) microscopic oscopic colitis; b) collagen new colitis.
3. *Diseases of the colon of known etiology*: a) ischemic colitis; b) radiation (radiation) colitis.
4. *Irritable bowel syndrome.*
5. *Other diseases of the colon*: a) parasitic (helminths, amoebae); b) diverticulosis; c) inert large intestine, etc.

In the extensive guide to enterology (2002) there is actually no harmonious and clear classification of bowel diseases [10]. The classification given in the manual (pp. 217–232) *is not a classification, but an inventory*, as wittily described in 1971 by V. K. Vasilenko, a similar "classification" of diseases of the joints and extraarticular soft tissues of the musculoskeletal system, proposed by A. I. Nesterov and M. G. Astapenko at the First All-Union Congress of Rheumatologists [17].

However, the validity of the replacement of the terms *"chronic enteritis"* and *"chronic colitis"* in the amorphous terms *"entero- and colopathy"* a significant proportion of cases can be challenged. For example, with the so-called gluten enteropathy morphologically, in addition to hyperregenerative villous atrophy of the small intestine, an immune-mediated inflammatory process is detected, the presence of a lymphoplasmocytic inflammatory infiltrate in the own plate of the small intestinal mucosa [22].

Inflammatory process is also revealed in so-called. NSAID-associative of dissociated enteropathy; with ischemic, radiation, toxic, allergic (hypersensitive) enteropathy, affecting both the small and large intestine.

They, in our opinion, should be classified as chronic enteritis and colitis. The same can be said about microscopic colitis (collagen, lymphocyte), which in foreign publications is exactly the same. [24, 25, 26, 27, 28, 29, 30, 31, 32]. A. I. Parfenov is forced to admit that antibiotic-associated enteropathy is an antibiotic-associated colitis [8]. In these cases, we consider unreasonable to use the indefinite term "enteropathy".

Recently, even *with irritable bowel syndrome* (IBS), which has been considered for many years as a functional disorder of the large intestine, the presence of an inflammatory process has been histologically detected [11], which could be foreseen: functional disorders without a morphological substrate are impossible. Outstanding pathologist D. S. Sarkisov for many years argued: "*It is always possible to detect morphological changes corresponding to subtle and dynamic changes in functions"* [14].

We believe that leading enterrologists of gastroenterologists should jointly discuss the problem of nomenclature and nosological classification of bowel diseases and present the results of the discussion to the medical community.

The famous physicist, Nobel laureate Niels Bohr recommended: "*Let's see what we know, and we will try to formulate it as best as possible"* [3]. In our opinion, it is worth to listen and follow the advice of the great scientist...

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The article discusses the terminology of chronic bowel diseases, advantages and disadvantages of the terms "enteritis", "colitis", "enteropathy", and "colopathy". It is emphasized that upon functional diseases of the intestine there are always morphological changes explaining bowel disorders. According to etiology, pathogenesis, localization of the process, presence of clinical syndromes, a detailed classification of diseases of the small and large intestines is presented. The pathogenesis of bowel diseases is discussed corresponding to the names of certain pathologies.