

## CLINICAL FEATURES OF CHRONIC GASTRODUODENITIS IN SCHOOLCHILDREN

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**Abstract.** *Gastroenterological pathology, including chronic diseases of the upper digestive tract in children, represents a serious medical and social problem due to its significant prevalence, course characteristics and high risk of early disability. Numerous studies examining the prevalence of chronic digestive diseases in various regions of the world indicate their high level. In Uzbekistan, there are a few studies reflecting the results of epidemiological studies among children with diseases of the gastrointestinal tract [1,2]. In the last decade, there has been no trend towards a decrease in the prevalence of pathology of the upper digestive tract in children; on the contrary, there has been a steady increase. According to various authors, its frequency has increased 2–2.5 times in recent years, which is associated both with a true increase in the number of patients with inflammatory lesions of the upper digestive tract, and with the use of new diagnostic techniques[3]. Features of the course of chronic gastroduodenitis in childhood are associated with the presence of critical periods affecting the formation of the gastrointestinal tract due to uneven growth and systemic organ disintegration against the background of intense morpho functional changes, immaturity of enzyme systems, tension in metabolic processes and restructuring of the neuroendocrine system of the body [4,5].*

**Keywords:** *epidemiological, chronic digestive disease, gastroduodenitis, esophagogastroduodenoscopy, hyperemia*

**The purpose of the work-** is to study the features of the clinical course of chronic gastroduodenitis in schoolchildren.

**Materials and methods.** 132 children aged 7 to 16 years were examined, including 72 (54.6%) boys and 60 (45.4%) girls. The research was carried out at school No. 235 in the Yunusabad district of Tashkent. An analysis of the life history and illness was carried out by questioning schoolchildren and their mothers, an analysis of the history of the child's development according to F112, an assessment of the current somatic status and endoscopy.

**Results and discussion.** In all examined patients, the diagnosis of chronic gastroduodenitis was confirmed endoscopically. We conducted an EGD study on 30 schoolchildren. Clinically, these children were diagnosed with gastroduodenitis. Esophagogastroduodenoscopy was performed under local anesthesia using a flexible fiber endoscope "Olympus CV 260" (Japan). Based on our endoscopic studies, it was noted that the most common gastritis in children was gastritis with predominant damage to the antrum of the stomach (32.1%) and widespread gastritis (24.3%), while isolated damage to the body and vault of the stomach was present only 18,6%. In 1 (3.3%) examined patient, changes were noted in the esophagus: hyperemia of the mucous membrane in the terminal section with isolated erosions. In 7 (25%) children, changes were observed in the bulb of the 12th intestine. The mucous membrane of the bulb is swollen, hyperemic.

The study found that the peak incidence of gastroduodenitis occurs in the age category of 14-16 years – 61.2%; at 11-13 years old – 23.3%; 7-10 years – 15.5%. An analysis of complaints

shows that children of the younger age group more often complained of abdominal pain, children aged 11-13 years - of dyspeptic symptoms, 14-16 years - of dyspeptic symptoms and astheno-vegetative complaints.

Pain syndrome of varying intensity was observed in 100% of cases, in the form of attacks lasting 5-10 minutes: mild - 8.3%, moderate - 64.3%, severe - 27.4%. A connection with food intake was noted in 51 (38.63%) children, and in 37 (28.1%) children it was not associated with food intake; in 44 (33.3%) children, Moynihan's rhythm of pain was noted; pain - eating - reducing pain. We regarded the last group of patients as a risk group for peptic ulcer disease. Seasonality of the pain syndrome (spring-autumn) was detected in 71 (53.8%), which was due to the weather lability of patients. In the children examined, the nature and localization of pain was varied. In 38.6% of them, pain was localized in the pyloroduodenal zone and radiating to the right hypochondrium.

***Comparative characteristics of the localization of pain in the examined children.***

Localization of pain	7-10 years		11-13years		14-16		TOTAL
	abs	%	abs	%			
Epigastric region	12	9,01	15	11,4	18	13,7	45(34,1%)
Right hypochondrium	4	3,02	6	4,54	11	8,3	21 (15,9%)
Left hypochondrium	4	3,01	4	3,01	7	5,28	15(11,3%)
Pyloroduodenal region	13	9,8	17	12,9	21	15,9	51(38,6%)

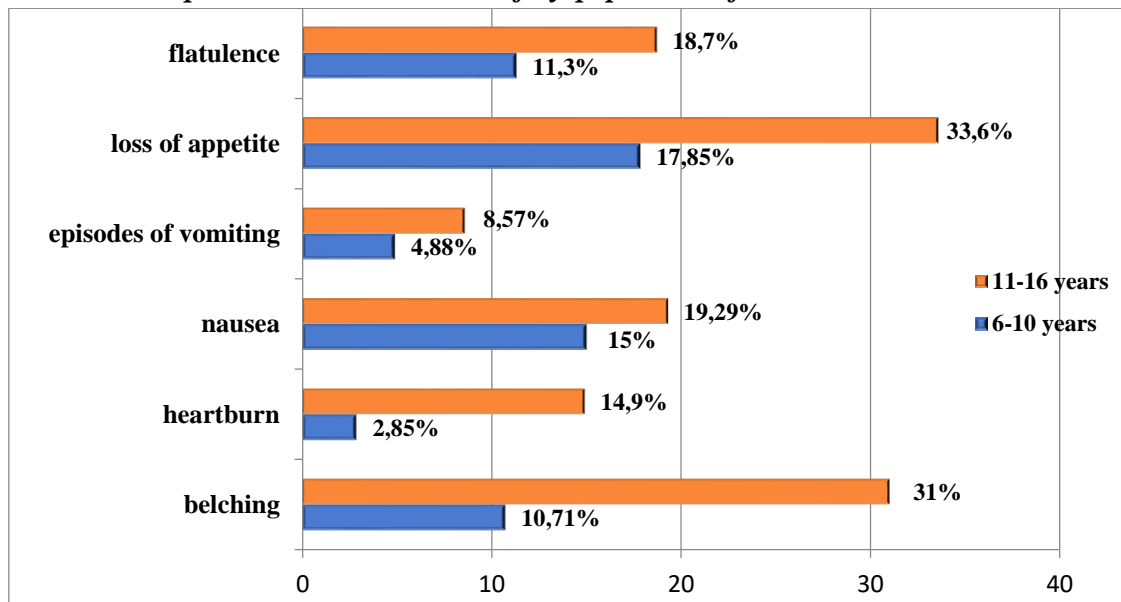
Children noted irradiation of pain to the right hypochondrium, regardless of the topography of the inflammatory process in the coolant. Most likely this was due to a concomitant violation of the motor-evacuation function of the biliary tract. The pain in most children was aching in nature (69.5%). The main factor that aggravated the pain was errors in diet (fatty foods, coffee, carbonated drinks with dyes, cakes, ice cream, fried foods), and less often physical activity. The pain subsided after taking enzymes and antacids. The duration of pain averaged 4.8 months, which most often determined the absence of indications for esophagogastroduodenoscopy. Only in 30 schoolchildren (2,14%) the duration of the pain syndrome was 1 year.

Dyspeptic syndrome was observed more often in adolescents (88.6%) and was manifested by heartburn (28.03%) and belching (60.6%). Appetite disturbances were observed in 72 (51.4%) of the examined children. The tongue was covered with a white or yellowish coating in 52 (37.14%) children. Also, 25 (18%) children complained of bad breath. 56% had a history of chronic constipation. Every other day in 50 (35.71%) children, stool passes once every 2-3 days in 10 (7.14%) children, in 15 (10.71%) cases of loose stool alternate with constipation and 5 (3.6%) noted that they quite often experience diarrhea and diarrhea. 57 (40.71%) children complained of flatulence. 86% of children had a high and moderate degree of physical activity during the day. Analysis of the diet and quality of nutrition shows that 58.3% of children ate regularly, 41.7% of children had irregular nutrition. 73 (55.3%) children had a balanced diet, and 49 (44.7%) children had an unbalanced diet.

Manifestations of polyhypovitaminosis were noted in 84 (61.4%) children. Clinical signs of polyhypovitaminosis were: pallor and dry skin, angular stomatitis, cheilitis, increased fragility

of nails and hair, transverse and longitudinal striations of nails, general weakness, and fatigue. Asthenovegetative syndrome was more often observed in schoolchildren aged 11-16 years and was manifested by increased fatigue in 36 (45%), headaches in 22 (27.5%), irritability, emotional lability in 46 (57.5%) children. At the same time, symptoms of autonomic dysfunction were determined in 18 (22.5%) children aged 11 to 16 years.

***Comparative characteristics of dyspeptic manifestations in children.***



The study of the morpho-functional features of changes in the mucous membrane of the stomach and duodenum in children was carried out using endoscopy. Endoscopic signs of damage to the mucous membrane were the severity of hyperemia and the area of its distribution, the condition and nature of the gastric folds and ridges, the amount and transparency of mucus accumulating in the mucous lake, the presence of various impurities in it, the appearance of hemorrhages, erosions, ulcers, bulges and other formations, the duration of their manifestation, the state of physiological sphincters and the activity of peristalsis.

When performing the study, first of all, the localization of changes was determined: gastritis of the body, antrum, pangastritis. The presence of edema, hyperemia, vulnerability of the mucous membrane, hyperplasia and atrophy of the folds, the presence of erosions, the visibility of the vascular pattern, and submucosal hemorrhages were taken into account.

We conducted an esophagogastroduodenoscopy study on 30 schoolchildren. Clinically, these children were diagnosed with gastroduodenitis. Esophagogastroduodenoscopy was performed under local anesthesia using a flexible fiber endoscope “Olympus CV 260” (Japan). Based on our endoscopic studies, it was noted that the most common gastritis in children was gastritis with predominant damage to the antrum of the stomach (32.1%) and widespread gastritis (24.3%), while isolated damage to the body and vault of the stomach was present only 18.6%. However, it is extremely difficult to clearly limit lesions to only the antrum or only the fundus. When examining the mucosa, the border of inflammation never looks like a clear border strip, but smoothly passes from the zone of inflammation to areas of unchanged mucous membrane. In 1 (3.3%) examined patient, changes were noted in the esophagus: hyperemia of the mucous membrane in the terminal section with isolated erosions. In 5 (25%) children, changes are observed in the bulb of the 12th intestine. The mucous membrane of the bulb is swollen, hyperemic.

Based on the studies conducted, the structure of gastroduodenal pathology in the examined schoolchildren was established. Our data showed that functional disorders of the gastrointestinal

tract predominate in children of primary school age. Functional disorders can be considered as a special case of dysfunction of an organ that is not associated with its organic damage. When dividing children with chronic diseases of the digestive tract into age groups, it was noted that the largest group consists of adolescents aged 11-16 years (57.2%). In children 6-10 years old, there is a high incidence of functional gastric disorders (FSD) - 42.8%. The structure of gastroduodenal pathology in the age aspect has been established; it has been shown that in primary school children, gastroduodenal diseases predominate, and with age they transform into organic pathology. If children have dull, aching pain, localized mainly in the epigastric region and occurring a short time after eating, often accompanied by belching of air, eaten food or sour, isolated damage to the stomach can be assumed. However, similar clinical symptoms could be detected with damage to organs located near the stomach, or with their combined lesions. For a final conclusion about the condition of the gastric mucosa, an endoscopy is necessary.

The structure of gastroduodenal pathology in the age aspect has been established; it has been shown that in primary school children, gastroduodenal diseases predominate, and with age they transform into organic pathology. Prevention of all variants of gastroduodenal pathology involves proper organization of diet, work and rest, timely identification of concomitant diseases, especially the digestive organs, and adequate treatment of patients. The main task is not only the effective treatment of diseases of the gastroduodenal organs, but above all the timely identification of risk groups for this pathology and the prevention of the development of the disease.

### **Conclusions**

1. During the study, it was found that in the structure of gastroduodenal pathology in primary schoolchildren, functional stomach disorders prevail - 42.8%; in high school, the proportion of patients with chronic pathology increases - 57.2%.

2. The clinical picture of chronic gastroduodenitis is characterized by a predominance of aching nature with predominant localization in the peri-umbilical and epigastric areas. Dyspeptic syndrome was observed more often in adolescents in the form of nausea, belching, and loss of appetite.

3. Chronic gastroduodenitis is extremely rare and occurs as an isolated disease. The entire gastrointestinal tract is involved in the pathological process with the manifestation of biliary dysfunctions, reactive changes in the pancreas, and impaired motility of the digestive tract. Early diagnosis of this disease is necessary, followed by preventive measures to prevent the development of combined pathology of various parts of the gastrointestinal tract.

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