WEB OF SCIENTIST: INTERNATIONAL SCIENTIFIC RESEARCH JOURNAL
ISSN: 2776-0979, Volume 5, Issue 01, January, 2024

RISK FACTORS FOR DEVELOPMENT OF STOMACH AND DUODENAL ULCERS IN CHILDREN

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ABSTRACT

In recent years, there has been an increase in the incidence of duodenal ulcer and an increase in the number of complicated forms. Bleeding from duodenal ulcers is the most formidable complication and occupies one of the first places in the structure of mortality from duodenal ulcer. The anamnestic, clinical features and pH values in children with duodenal ulcer were studied. The study allows us to consider sex, age, heredity, erosive nature of gastroduodenitis, multiple ulcers, high bacterial contamination, low pH in the antroduodenal zone as factors for the complicated course of duodenal ulcer.

Keywords: duodenal ulcer, factors, ulcerative bleeding, predictors of complications, children.

INTRODUCTION

In recent years, peptic ulcer due to the high prevalence, rejuvenation, aggravation of the clinical course of the disease and the lack of effectiveness of the therapy is an urgent problem of clinical medicine [1,4,5,9,15,18]. Among the etiological factors in the occurrence of peptic ulcer, heredity plays an important role. The role of hereditary burden is especially great in duodenal ulcer (DU), which is inherited in an autosomal dominant or autosomal recessive type, not sex-linked [3,4,5,10,12,14,19].

An important factor in the development of inflammatory and destructive changes is the specific infectious agent Helicobacter pylori. The frequency of infection of children with Helicobacter pylori infection is constantly increasing and reaches a maximum in the adult population, which makes it possible to consider Helicobacteriosis as the most common infection of mankind.

A feature of the course of peptic ulcer in modern conditions is a change in morphogenesis - an asymptomatic course or without pain is observed in more than 5% of patients; seasonal exacerbations are leveled, insufficient effectiveness or resistance to the therapy is noted, and complications of the disease often develop [5,,11,17,20,22]. It is known that in 26-42% of patients with duodenal ulcer (DU)

there are various complications, among which gastrointestinal bleeding accounts for 30-40% of cases, ulcer perforation - 21-27% [1,5,13,16,21].

Bleeding from duodenal ulcers is the most formidable complication and occupies one of the first places in the structure of mortality from duodenal ulcer. According to various authors, overall mortality is 10-14%, postoperative - from 12 to 35% [1,5]. The available literature provides various opinions explaining the problem of gastroduodenal ulcers.

bleeding: widespread peptic ulcer, irregular intake of non-steroidal anti-inflammatory drugs and aggressive anticoagulant therapy; the lack of a unified doctrine for the treatment of ulcerative bleeding [2,5-8].

The factors leading to the recurrence of the disease and the development of complications remain poorly understood, and the data published in the literature on the role of individual predictors in the development of complications are contradictory. The aspect of the problem of peptic ulcer associated with the search for predictors of the development of life-threatening complications is of undoubted relevance and is in demand in clinical practice.

PURPOSE OF THE STUDY

Study of the main risk factors for the development of gastric and duodenal ulcers.

MATERIAL AND RESEARCH METHODS

In the 2nd clinic of the Samarkand Medical Institute, 38 sick children with duodenal ulcer (DU) in the acute phase were treated. The main group consisted of 12 (31.5%) patients with complicated course of the disease (bleeding) (PUD). The comparison group included 26 (68.4%) patients with uncomplicated DU (exacerbations of 1 or less during the year, no destructive complications ever). The study did not include patients with a history of taking ulcerogenic drugs (nonsteroidal anti-inflammatory drugs, glucocorticoids, etc.) during the last 3 months.

When distributing the examined by gender, the main group included 10 (83.3%) boys and 2 (16.7%) girls, in the comparison group, respectively, 18 (69%) and 8 (31%), respectively. The average age of patients at the time of the study was 16±1.0 years in the group with complications, 12±2.4 years without complications ($P<0.01$).

Patients underwent: endoscopy, determination of the titer of IgG antibodies to HP in blood serum, intragastric pH-metry.

Endoscopy. Endoscopy was performed in all patients using the Olympus device (Japan) before treatment and after a course of antiulcer therapy.

Diagnosis of HP infection, determination of the presence of IgG antibodies to HP in the blood serum and their titer using the enzyme immunoassay "ImmunoComb HP IgG".

Intragastric pH monitoring was performed for all patients using the Gastroscan-AGM apparatus. At the same time, the average pH was evaluated. Patients with HP-positive DU received a standard 10-day eradication therapy regimen in the hospital: omeprazole 20 mg 2 times a day + amoxicillin 50 mg/kg 2 times a day + clarithromycin 15 mg/kg 2 times a day. Further treatment continued with Denol 120 mg 4 times a day for 3 weeks. Control EGDS was performed 21 days after the start of treatment until scarring of the ulcer. The effectiveness of eradication therapy was monitored using the respiratory Helic test 1 month after the end of treatment.

RESULTS AND ITS DISCUSSION

When studying the anamnesis of patients, it turned out that heredity for the underlying disease was aggravated. Thus, the presence of PU in close relatives of patients of the main group was detected in 7 (58.3%), and in 3 (25%) - a severe course, 4 (33.3%) of close relatives also had a history of bleeding. In sick children from the control group, hereditary burden was also traced 14 (46.7%), no complications were noted in relatives in this group.

It was established that the duration of the ulcer history in patients of the main group was 1.5 times less than in the comparison group, which indirectly indicates a more aggressive course of the disease in the former and, possibly, an asymptomatic debut. In patients of the control group, the duration of the disease at the time of the examination was 3.1±0.6 years, and in patients of the main group it was 1.4±0.3 ($P<0.01$). Relapses of the disease in the main group were observed less frequently than in the comparison group, 3 (25%) patients had destructive complications. According to the anamnestic study, there were no significant differences between the groups in terms of localization, irradiation of pain and its relationship with food intake. Night pains were more often recorded in the comparison group. Also, for the uncomplicated course of DU, moderate pains of typical localization were most characteristic.

The complicated course of DU was accompanied by less pronounced symptoms. The pain syndrome was quite typical in its localization, however, it had a lower intensity, the pains were more localized. With complicated DU, patients noted the absence of pain much more often than with DU (33.3% and 6.7%, respectively), less often - a significant intensity of the pain syndrome (25% and 40%). Seasonal exacerbations in

the autumn-spring period were significantly more common in the group with PUF (56.7% and 33.3%, respectively).

Material and living conditions were unsatisfactory in 8 (66.7%) children with bleeding, and only in 12 (46%) of the comparison group.

In endoscopic examination, antral gastritis and duodenitis were diagnosed in all patients. In 7 (58.3%) patients of the main group, an erosive nature of gastroduodenitis was noted.

Ulcerative defects in both groups of patients were localized mainly on the anterior and posterior walls of the duodenal bulb and much less frequently on the greater and lesser curvature. It should be noted that there were no statistically significant differences in the localization of ulcerative defects in the duodenum in the studied groups. The average size of the ulcer in children with PUD was 3.1±1.79 mm, which exceeds that in the control group (1.8±1.14 mm) ($p>0.05$).

When studying the acid-forming function of the stomach in children with DU, a state of hyperacidity was revealed in the area of the body of the stomach. The indicators of both the main and control groups significantly ($p<0.01$; $p<0.05$, respectively) differed from the standards. As for pH-metry in the antrum area, increased acid production (or a decrease in the alkalizing function of the stomach) is typical for children with a complicated course of the disease, in which this indicator was significantly ($p<0.001$) lower than both the values of healthy and control groups.

According to the results of the study, HP infection was detected in 22 (84.6%) patients with PU and in all children of the main group. In patients with PU, a high titer of IgG to Hp was significantly more common (58.3% and 16.7%).

CONCLUSIONS

Thus, risk factors for gastric and duodenal ulcers in children have been identified: high school age, hereditary history of peptic ulcer disease, male gender, unsatisfactory living conditions, identification of erosive gastroduodenitis. Clinical examination of patients in family clinics helps reduce complications of the disease.

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