

Causes of Development of Gastric and Duodenal Ulcers in Children and Principles of Dietary Treatment

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ABSTRACT

This article discusses causes of development of gastric and duodenal ulcers some suggestions about the principles of dietary treatment. Gastric ulcers are a relatively infrequent occurrence in children. Gastric and duodenal ulcers in children and older ones have a relapsing course that is increasingly recognized to be related to coexisting, chronic, active antral gastritis and *Helicobacter pylori* infection.

Introduction

In recent years, cases of stomach ulcers in children have become more common. There is also a "rejuvenation" of the disease, a severe course and a decrease in the effectiveness of therapy. In this regard, stomach and duodenal disease is a serious problem both in diagnosis and treatment in pediatric practice.

Ulcerative lesions in children are mainly located in the duodenum and less often in the stomach. The main etiological factor in the development of the disease is *Helicobacter pylori* (HP) and its long-term retention in the gastric mucosa. HP can be transmitted fecal-oral and oral through personal hygiene products. During examination, HP is found in 50-100% of patients in the gastric mucosa.

Factors leading to the development of gastric ulcer disease:

1. Alimentary: eating poorly chewed food, dry food; eating cold or very hot food; eating food with many spices; break the order of eating.
2. Long-term and frequent use of drugs.
3. Physical and psycho-emotional stress
4. Heredity, food and drug allergies

Pathomorphological process mechanisms.

Persistent persistence of HP in the gastric mucosa initially leads to the formation of an

inflammatory infiltrate. Under the influence of bacterial enzymes produced by HP, mucosal cells are damaged and the protective mucous barrier is destroyed, as a result of which atrophic processes develop in the gastric glands. This leads to changes in secretions and disturbances in the functioning of the stomach. Often, a violation of the motor function of the stomach is accompanied by reflux - the outflow of duodenal fluid into the stomach and the development of inflammation in it. Unlike adults, complex forms are less common in pediatric practice: penetration, development of mechanical stenoses. Ulcerative defects in the bulbar part of the duodenum in children are often observed (in 85%), and only in 15% there is a post-bulbar localization. The back or front wall is affected with the same frequency, but when an ulcerated defect is located on the back wall, it ends with the formation of a scar (deformation of the bulbar section is detected on X-ray). In addition, post-bulbar defects have a longer healing period than bulbar defects, and are often accompanied by gastrointestinal bleeding. The stages of the process, complications and the presence of concomitant diseases should be taken into account in the diet treatment plan. Children are prescribed an anti-ulcer diet for 5-7 days in the I or II stage of peptic ulcer disease. It provides mechanical, chemical and thermal treatment. Frequent meals 6-8 times a day prevent the effect of peptic hypersecretion on the mucous membrane of the stomach and duodenum. Milk and dairy products have a special antacid effect. Only if milk is not digested (lactose deficiency), it can be replaced with kefir for one day. Porridges with egg yolk and butter with a minimum amount of table salt have protective properties. Eggs are prescribed only soft-boiled. Porridge or jelly is recommended for appropriate dishes.

A set of samples of products (for children of school age): milk - up to 1 l, butter - 80-100 g, eggs - 3-4 , sugar - 100 gr, various cereals - 70 gr, fruit juices - 200-300 ml, potatoes - 15-25 g. at the same time, the patient receives in the daily diet: calories - 2000-2200, proteins - 50 gr, fats - 100 gr, carbohydrates - 250 gr. 7 meals (every 2-2.5 hours) and 1 glass of milk or jelly at night before going to bed. All foods are soup or slimy (salt is limited).

The effectiveness of clinical signs with such a diet is determined by the reduction of pain syndrome and the elimination of dyspeptic diseases.

Since the 1a diet table does not fully satisfy the physiological needs of a child with a stomach ulcer, it should not be given for more than a week. After 1 week, they move to 16 tables: liquid porridges with milk (rice, oatmeal, semolina, etc.) and puddings, slices of white bread and steamed minced meat and fish (dumplings, meatballs) are introduced. Fruits are served in crushed form or in the form of porridge. The set of products includes: milk - 600-1000 ml, eggs - 2 pcs., fat - 60-80 g, meat - 100-125 g, sugar - 100 g, dried fruit - 100 - 150 g, cereal porridge - 100 g, white dried bread - up to 100 g, potato flour - 30 g. Daily calorie intake is increased to 2700 kcal. At the same time, the amount of protein is 80 g, fat - 85-90 g, carbohydrates - 300-400 g. eating every 2.5-3 hours (6 times a day). A glass of milk is given at night before going to bed. This menu can be postponed for another 1 week with the slow progress of reparative processes, which is evaluated by clinical (pain syndrome, dyspeptic diseases) and endoscopic (intensity of the process of epithelialization of the mucosal defect) symptoms. Usually, starting from the 3rd week of inpatient treatment, the patient is transferred to the 1st table with a wound, where the patient is given 5 times meals, an interval between meals of 3-4 hours, with a light dinner. The composition of this menu is very physiological, as it contains complete animal proteins, fats, vitamins and mineral salts. After leaving the hospital, you can switch to a gradually changing diet with the condition of continuous remission for 6-12 months. But the appearance of pain syndrome is a direct indicator of returning to a stronger diet. Pickles, smoked foods, marinades, fried foods, preserves, meat and fish broths, carbonated drinks, spices (peppers, onions, etc.), cucumbers, cabbage, currants, lean meat (that is, products with a lot of coarse fiber) with stomach ulcers excluded from the diet of a sick patient.

Conclusion

To sum up, the organization of nutrition for children with stomach and duodenal ulcers is a process that requires the use of modern diagnostic methods and nutritional options, primarily the use of special products that protect the mucous membrane, protecting it from the effects of mechanical, chemical and thermal factors.

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