

Clinical and Diagnostic Features and Therapy of Diaphragmatic Hernia, Chronic Gastritis, Peptic Ulcer Disease, Gastric Cancer, and Hepatobiliary System Diseases in Elderly and Senile Patients

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INTRODUCTION

Diseases of the stomach, diaphragm, liver, and biliary tract occupy a leading place in the structure of gastroenterological morbidity in elderly and senile individuals [12, 14]. A characteristic feature of these diseases in geriatric patients is the atypical nature of clinical manifestations, blurred pain syndrome, frequent absence of classic seasonal exacerbations, as well as a high probability of complications – bleeding, perforation, malignancy [5, 14]. Furthermore, age-related restructuring of the digestive organs often masks oncological pathology, which requires increased oncological vigilance from the physician [8, 15]. Elderly people often exhibit a combination of several gastrointestinal tract diseases, which complicates the identification of the leading syndrome [1, 12]. In this article, based on a complete analysis of the original clinical material, we discuss in detail diaphragmatic hernia, chronic gastritis, peptic ulcer disease (including its "old," "late," and "senile" forms), gastric cancer, as well as acute and chronic hepatitis and gallbladder diseases, with an emphasis on age-related features of their clinical presentation, diagnosis, and treatment [4-10].

Keywords: Diaphragmatic hernia; Chronic gastritis; Gastric ulcer; Gastric cancer; Acute viral hepatitis; Chronic hepatitis; Cholecystitis; Cholelithiasis; Elderly and senile age; Anemia; Gastrointestinal bleeding

DIAPHRAGMATIC HERNIA

The incidence of diaphragmatic hernias in elderly and senile people naturally increases [1, 4]. This is due, firstly, to age-related changes in the musculoligamentous apparatus that forms the esophageal hiatus of the diaphragm, which becomes more pliable and distensible [10, 12]. Secondly, frequent straining during chronic constipation, difficult urination (prostate adenoma), and chronic lung diseases accompanied by coughing play an important role – all this contributes to increased intra-abdominal pressure [11, 14]. Often, a diaphragmatic hernia is discovered completely

incidentally during radiological or endoscopic examination for another reason, which is explained by the small size of the hernial sac, the smoothing of symptoms, or their atypical nature [10, 19].

The clinical picture can be quite diverse [1]. Patients often complain of heartburn, belching of air or food eaten the day before, as well as pain in the epigastrium or behind the sternum [4, 10]. The latter symptom is often mistakenly taken for angina pectoris, leading to unjustified prescription of cardiological drugs and loss of time [13, 18]. A characteristic sign is increased pain in a horizontal position after eating, which is associated with easier reflux of gastric contents into the esophagus [1, 4]. Sometimes the first and only symptom may be gastric bleeding, more often occult, which eventually leads to anemia [8, 10]. As clinical experience shows, diaphragmatic hernia occupies far from the last place among the causes leading to anemia in elderly and old people [12, 14].

The diagnosis is based on radiological examination (detection of part of the stomach in the chest cavity) and endoscopy (identification of the hernial orifice, reflux esophagitis) [1, 4]. The authors emphasize an extremely important point: esophageal cancer can be masked by the clinical picture of a diaphragmatic hernia [10, 12]. According to various researchers, the combination of esophageal cancer and diaphragmatic hernia is observed in 4-8% of cases [1, 14]. For the purpose of early diagnosis of esophageal cancer, it is advisable to conduct a thorough histological examination of mucosal biopsies, especially those taken from scars [4, 10]. Treatment of a diaphragmatic hernia depends on its size and the presence of complications [12, 14]. For small and non-fixed hernias, therapeutic measures are aimed at treating and preventing the progression of the disease and the development of complications (inflammatory process, strangulation, etc.) [1, 6]. For large hernias, frequent bleeding, detection of atypical cells in biopsies, the question of surgical intervention is raised [8, 10].

CHRONIC GASTRITIS.

One of the most common diseases in elderly and senile people is chronic gastritis [3, 20]. It is a peculiar progressive inflammatory process that affects the mucous and submucous membranes with the development of structural and functional changes in secretory cells and glands, which leads to a progressive decrease in the number of glands and secretory cells in them, as well as the appearance of cells foreign to the stomach that produce mucus (intestinal metaplasia) [6, 21]. Chronic gastritis is a polyetiological disease [3, 20]. Among exogenous causes, the main ones are: violation of diet, overeating, systematic consumption of very hot or cold food, poor chewing, alcohol consumption, smoking [6, 21]. Among endogenous causes, disorders in the neurohumoral regulation system, duodenogastric reflux, chronic inflammatory diseases of other organs (cholecystitis, colitis, etc.) are distinguished [3, 20]. Regardless of etiology, the disease manifests itself, as a rule, with varying degrees of morphological changes in the mucous membrane and secretory insufficiency [6, 21]. In older people, the frequency of widespread atrophic gastritis with achlorhydria and achylia reaches 40-60% [3, 20].

The clinical picture of both exacerbation of chronic gastritis and acute gastritis is manifested by gastric discomfort syndrome: nausea, vomiting, belching of air or food eaten the day before, a feeling of fullness and heaviness in the epigastric region, where pain is also predominantly localized [6, 21]. At the same time, the patient's general well-being often worsens, and cardiovascular insufficiency may develop, which requires differentiation from the gastralgic form of myocardial infarction, acute ulcer, and an attack of cholecystopancreatitis [3, 20]. Such patients are strongly

recommended to undergo a control ECG [6, 21]. The diagnosis presents significant difficulties due to the frequently occurring latent course and the absence of specific symptoms [14-20]. The most pathognomonic signs of chronic gastritis in older people are: the absence of pronounced deterioration in well-being and significant weight loss (despite the long duration of the disease), the undulating nature of the course, the predominance of dyspeptic syndrome over pain, and the presence of gastric secretory insufficiency [6, 21]. The final diagnosis is made based on the results of histological examinations of gastric mucosal biopsies [3, 20].

PEPTIC ULCER DISEASE

Ulcerative lesions in elderly and senile people are usually divided into three categories [5, 8]. The first is "old" peptic ulcer disease that arose in young or middle age and has existed for a long time [13, 15]. The second is "late" peptic ulcer disease that developed in elderly or senile age [5, 8]. The third is "senile ulcers," which are essentially symptomatic ulcers in chronic diseases of the circulatory system, respiratory system, as well as with long-term use of a number of medications (cardiac glycosides, rauwolfia preparations, etc.) [13, 15]. The etiology and pathogenesis of "old" and "late" peptic ulcer disease are the same and come down to an imbalance between the aggressive factors of gastric juice and the protective factors of the mucous membrane [5, 8]. However, if in young people an increase in the aggressiveness of gastric juice predominates, then in the elderly the protective factors are weakened to a greater extent: the regenerative capabilities of epithelial cells decrease, blood supply is disrupted, the mucous membrane changes against the background of long-standing chronic gastritis, which is detected in almost 100% of elderly patients with peptic ulcer disease [3, 7].

In elderly people, gastric ulcers are localized 1.7 and 3 times higher, respectively, than in the duodenum [5, 8]. The symptoms of "old" peptic ulcer disease do not have significant age-related differences, however, due to the duration of the disease, the presence of cicatricial deformity, perigastritis and periduodenitis, the nature and localization of pain may change, a clear seasonality of exacerbations is less frequently detected, and a constantly progressive type of course with longer periods of exacerbation is more common [13, 15]. "Late" peptic ulcer disease has a number of features: the pain is usually moderate, often constant and independent of food intake; the localization of pain is very diverse and atypical — in the epigastrium, under the xiphoid process, behind the sternum with irradiation to the back, left arm, heart area, right or left hypochondrium [5, 8]. In some cases, the pain syndrome is completely absent, and the main, and sometimes the only, symptom may be profuse or occult bleeding [6, 18]. In almost 50% of older people, peptic ulcer disease is accompanied by occult bleeding [5, 8]. Profuse bleeding is the most common complication and is due to atherosclerotic damage to the eroded vessel — its wall is thickened, which impairs contractility and makes clot retraction difficult [13, 15]. Bleeding is often combined with perforation [4-10]. "Senile" ulcers are usually larger in area, but shallow, with clear contours, a moderately expressed inflammatory mound, and necrotic plaque at the bottom [13, 15]. For differential diagnosis with gastric cancer, histological examination of biopsies from the edges and bottom of the ulcer is of paramount importance [3, 9].

GASTRIC CANCER

Gastric cancer most often occurs at the age of 40-70 years; men are affected 2-3 times more often than women, but with age these differences decrease [18, 21]. A frequent combination of gastric cancer with precancerous diseases has been noted, the frequency of which increases with age: chronic atrophic gastritis with restructuring of the mucous membrane (intestinal metaplasia), polyposis, gastric ulcer, pernicious anemia [3, 6]. The nature of tumor growth affects the clinical picture: exophytic tumors grow more slowly, endophytic-ulcerative tumors grow faster [5, 11]. In elderly and senile age, the tumor process progresses more slowly and metastasis occurs later [13, 15]. Among the clinical forms, dyspeptic, anemic, cachectic, and hemorrhagic are more common [5, 8]. The main complaints are: decreased appetite up to complete aversion to food, rapid satiety, symptoms of gastric discomfort, bloating after eating, vomiting [16, 20]. However, dyspeptic disorders usually appear already in the late period [5, 8]. Therefore, special attention should be paid to indirect signs: weight loss, hypochromic anemia [3, 6]. The diagnosis is difficult due to frequent asymptomatic presentation and variety of manifestations [13, 15]. X-ray examination, gastroscopy with targeted biopsy, and cytological examination of gastric lavage water play a decisive role [5, 8]. Treatment is surgical, but with concomitant cardiovascular and pulmonary pathology, it is often limited to symptomatic therapy [11-14].

DISEASES OF THE LIVER AND GALLBLADDER

Acute viral hepatitis in the elderly is rare; serum hepatitis (HBV) is more often diagnosed [7, 11]. A feature is a significant lengthening of all periods of the disease, an increase in functional test parameters, and sometimes an enlargement of the spleen [16, 17]. Chronic hepatitis usually occurs in adulthood and occurs in an active or persistent form [18, 19]. Active hepatitis in the elderly is more severe and in 10% of cases progresses to cirrhosis [7, 11]. Gallbladder diseases are among the most common, with women being affected 3 times more often [9, 12]. In 90% of cases of acute cholecystitis, the cause is cholelithiasis [9-14]. The pain syndrome is often mild, which leads to late presentation [7, 16]. A decrease in immunobiological reactivity leads to rapid spread of inflammation, development of empyema, gangrene, perforation, and biliary peritonitis [17, 18]. Jaundice may be the first symptom of common bile duct obstruction by a stone [14, 20].

CONCLUSION

Diseases of the stomach, diaphragm, liver, and biliary tract in elderly and senile individuals are characterized by atypical or blurred pain syndrome, a predominance of dyspeptic complaints, a frequent latent or oligosymptomatic course, a high incidence of complications (bleeding, perforation, malignancy, peritonitis), as well as significant difficulties in differential diagnosis, especially with myocardial infarction and angina pectoris [1-4]. Age-related restructuring of the gastric mucosa, decreased regenerative capacity, vascular changes, and long-term medication use aggravate the course of these diseases [5-8]. Management of such patients requires an integrated approach with mandatory use of radiological, endoscopic, ultrasound, and histological methods [9-13]. Special attention deserves oncological vigilance: any ulcer, any dyspepsia in an elderly person requires exclusion of a malignant process [14, 18]. Therapy should be as personalized as possible, taking into account comorbidities and functional reserves of organs [19-21]

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