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COMORBIDITY IN PATIENTS WITH ACIDITY-RELATED DISEASES AND HYPERTENSION IN THE SAKHA REPUBLIC (YAKUTIA)

ABSTRACT

The aim of the investigation was to study the comorbid status in patients with acidity-related diseases and hypertension.

Materials and Methods. A retrospective analysis of medical records of 63 patients with acidity-related diseases, which were treated in the therapeutic department of the Republican Hospital №1 of Yakutsk, was done.

The study identified comorbid course of acidity-related diseases with arterial hypertension, respiratory diseases and urinary system that may be associated with a single mechanism of lesions of various organs and systems.

Keywords: acidity-related diseases, chronic gastritis, peptic ulcer disease, gastroesophageal reflux disease, comorbidity.

INTRODUCTION

Acidity-related diseases (ADD) occupy a leading position in the overall incidence of the North. They are prone to chronic relapsing course, affect the most productive age, reduce the quality of life of the population and cause enormous social and economic damage. Acid disorders include such common diseases as chronic gastritis, peptic ulcer, gastroesophageal reflux disease (GERD). GERD is a chronic relapsing disease, the cause of which is a pathological cast of the stomach content into the esophagus. By its frequency, temporary disability and complications is a socio-medical problem in the modern society, including those in the North [3, 5, 6]. Questions of diagnostics, etiology, pathogenesis, clinical symptoms and treatment of these diseases have not lost the sharpness of perception and continue to be relevant.

Nowadays, with the development of diagnostic capabilities of medicine, it is hard to talk about one disease, as in most clinical cases there are comorbidities. Interference of diseases significantly changes clinical symptoms and course of disease, the nature and severity of complications, impairs the quality of life of the patient, retards diagnostic and treatment process. The combination of acidity-related diseases and arterial hypertension (AH) is a new state of regulatory system. Their synergy is not accidental, because for both nosologies common etiological and pathological communications are identified. The presence and progression of inflammatory changes in the mucous membrane of the stomach and esophagus in these patients contributes to a specific profile of blood pressure [2, 6].

Objective – to study the comorbid status in patients with acidity-related diseases and hypertension. To identify interference of diseases depending on gender, age, laboratory and instrumental methods of research.

Materials and methods. We randomly analyzed medical records of 63 patients from 20 to 72 years (mean age 58 yrs), 40 women and 23 men, who were hospitalized in therapeutic department of the Republican Hospital №1, Yakutsk. In the selected history cases acidity-related diseases and their combination with other somatic diseases, regardless of the reason for hospitalization were highlighted. The analysis of medical history, physical examination, laboratory data and instrumental methods has been done.

Results and discussion. According to our data among patients with ARD women (67%) dominated. Chronic gastritis (CG) was diagnosed in women in 2 times more often than in men (Table). It is known that the CG is the most common disease of the gastrointestinal tract. This is not only inflammation, which

affects the mucous membrane of the stomach, but the organism overall disease. It is proved that certain clinical and morphological forms of the CG precede or accompany the development of these prognostically unfavorable diseases such as peptic ulcer (PU) and gastric cancer. Thus, the CG is a kind of link between the different diseases, not only of the stomach. The high prevalence of the CG in the Yakutia residents is also associated with *Helicobacter pylori* infection [1, 4].

Diseases of the digestive system in hospital patients, %

Diagnosis	Female	Male	Total
Gastroesophageal reflux disease	33.3	66.7	9.0
Chronic gastritis	77.7	33.3	54.5
Peptic ulcer disease	80.0	20.0	15.1
Chronic cholecystitis	53.8	46.2	39.9
Cholelithiasis	70.3	29.0	21.2

According to our data, there was a predominance of gastric ulcer in women compared to men; the ratio was 4: 1. Whereas in the men more often duodenal ulcer and in 2 times more common GERD were diagnosed. Peptic ulcer disease is among the most frequent diseases of the adult population (about 5-10%), and takes on the prevalence the second place after coronary heart disease (CHD) [5]. Relying on the results of our research we can indicate comorbid course of chronic gastritis and hypertension - 27% (female- 33%, male -67%), CG and dyscirculatory encephalopathy - 18% (67 and 33% respectively). Comorbidity was noted in patients with chronic gastritis, and respiratory diseases such as chronic bronchitis - 27% (33% female and 67% male), pulmonary fibrosis - 52% (82 and 18%), CG and chronic kidney disease - 42% (female - 64, male - 36%). In women comorbid course was for PUD and osteochondrosis- 39%, osteoarthritis- 24, uterine myoma - 15%. In women, the disease of the stomach and duodenum is often associated with use of the nonsteroidal anti-inflammatory drugs (NSAIDs) to treat the diseases of the musculoskeletal system. Such background diseases as atherosclerosis, diabetes mellitus (DM) lead to the development of comorbidities. Hyperglycemia and peripheral neuropathy at diabetes lead to the emergence of non-ulcer dyspepsia and GERD. According to our observation, in 6% of patients with diseases of the upper gastrointestinal tract DM was detected. Comorbidity was in the patients with hepatobiliary disease and hypertension - 24% (female - 75, male - 25%), ischemic heart disease - 15% (80 and 20%), dyscirculatory encephalopathy - 21% (57 and 43%), respectively, in the blood chemistry lipid metabolism, elevated levels of cholesterol, LDL, glucose were revealed. It is known that the metabolism of cholesterol can lead to gallbladder cholesterosis, cholelithiasis, and fatty liver and is a risk factor for atherosclerotic vascular lesions of the heart, brain, hypertension.

Conclusions. The frequency of diseases of the gastrointestinal tract increases with age. Women are more often than men diagnosed with chronic gastritis, duodenitis, chronic cholecystitis, and cholelithiasis. Women often take NSAIDs concerning comorbidities. Comorbid diseases of the digestive system and hypertension, respiratory and urinary tract were revealed. The presence of common pathogenetic mechanisms of diseases that make up this combination requires a series of investigations. Knowledge of current comorbid diseases is necessary for a doctor, not only in diagnostics, but also to avoid polypharmacy. The use of drugs, affecting a single pathogenic mechanism of diseases, allows achieving a positive effect of treatment with minimal use of drug therapy.

REFERENCES:

1. Bessonov P.P. Bessonova N.G. Kurilovich S.A. Reshetnikov O.V. Gastroezofageal'nyj refljux i simptomy dispepsii u korenno gosel'skogo naselenija Jakutii [Gastroesophageal reflux and dyspeptic symptoms in native rural population of Yakutia] *Jakutskij medicinskij zhurnal* [Yakut Medical Journal]. 4 (40), 2012, pp. 28-30.
2. Bessonov P.P. Bessonova N.G. Timofeeva N.V. Gastroenterologičeskaja patologija i soputstvujushhie zabolevanija u pacientov v uslovijah Severa [Gastroenterological diseases and comorbidities in patients in the North] *Nauka i mir. Mezhdunarodnyj nauchnyj zhurnal* [Science and peace. International Journal]. 2014, №1 (5), pp. 345-346.
3. Ivashkin V.T. Truhmanov A.S. Holinergičeskaja stimuljacija: ee rol' v osushhestvlenii dvigatel'noj funkcii pishhevod i klirensa pri gastroezofageal'noj refljuksoj [Cholinergic stimulation: and its role in the motor function of the esophagus and in the clearance of gastroesophageal reflux disease] *Kliničeskie perspektivy gastroenterologii, gepatologii* [Clinical prospects of gastroenterology, hepatology]. 2011, pp. 3 - 8.
4. Kurilovich S.A. Reshetnikov O.V. Krotov S.A. Belkovets A.V. Neinvazivnaja diagnostika predrakovyh zabolevanij zheludka: ucheb. posobie [Noninvasive diagnosis of precancerous lesions of the stomach: handbook]. Novosibirsk: Publishing House of the NSTU, 2013, 68p.
5. Kurilovich S.A. *Jepidemiologija zabolevanij organov pishhevarenija v Zapadnoj Sibiri* [Epidemiology of digestive diseases in Western Siberia]; edited by academician Yu.P. Nikitin, Novosibirsk, 2000, 165 p.
6. Emelyanova E.A. Safonova S.L. [et al.]. Aktual'nye problemy pervichnoj mediko-sanitarnoj pomoshhi naseleniju [The prevalence of digestive system diseases of the adult population in Yakutia] *Aktual'nye problemy pervichnoj mediko-sanitarnoj pomoshhi naseleniju* [Current problems of primary health care]. Yakutsk, 2011, pp. 53-55.

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