

PHARMACOCORRECTION OF NSAID– GASTROPATHY IN RHEUMATOID ARTHRITIS

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Abstract

RA belongs to the class of autoimmune diseases - when the body, instead of destroying natural enemies (disease-causing microbes, tumor cells, etc.), suddenly takes up arms against its own healthy tissues and begins to destroy them. With rheumatoid arthritis, the connective tissues of the joints are affected. Periarticular tissues such as ligaments and muscles can also become inflamed. RA is a frequent and one of the most severe immuno-inflammatory diseases in humans, which determines the great medical and socio-economic significance of this pathology.

Keywords: pain syndrome, gastroprotectors, gastrointestinal tract, ulcerative lesions of the gastric mucosa, joint, study of biopsies of the gastric mucosa.

Introduction

The prevalence of RA among the adult population in different geographical areas of the world ranges from 0.5 to 2% [1, page 2]. According to official statistics, about 300 thousand patients with RA have been registered in Russia, while according to the Russian Epidemiological Study, about 0.61% of the total population of NSAIDs suffers from RA-the most widely used class of medicines in clinical practice and everyday life.[2, page 37]. They are used for the treatment of diseases and pathological conditions associated with the presence of fever inflammation. NSAIDs remain essential for the treatment of the most important, socially significant rheumatological diseases, such as rheumatoid arthritis, ankylosing spondylitis, osteoarthritis.[3, page 57]. It is in rheumatology practice that NSAIDs are used for a long time and in high doses. This pathology is very common and considered characteristic of elderly patients. According to the classical data of Fries J. (1996), approximately 1% of patients receiving ongoing treatment with these drugs develop severe gastroduodenal complications - LJ or ulcer perforation within a year. This pathology is one of the most important causes of death of patients with rheumatic diseases - so patients with RA die from gastroduodenal complications 2 times more often than in the population. [4, page 77]. Nonsteroidal anti-inflammatory drugs can cause serious complications from the gastrointestinal tract (gastrointestinal tract) in the form of erosive and ulcerative lesions of the mucous membrane of the gastroduodenal zone. The prescription of safer NSAIDs and gastroprotectors can reduce the frequency of these complications. [5, page 49].





The purpose of our research was to investigate the effectiveness of the drugs movalis and pantoprazole gastroprotectors, the effectiveness of their interaction

Materials and Methods:

40 patients were examined, who had accurate RA, with an average degree of activity. The average age of patients was 39+ 16.1 years. Pathology from the gastrointestinal tract was detected by a thorough clinical examination. All patients underwent endoscopic examination. The patients were divided into 2 groups with the clinical manifestations of NSAID-gastropathy:

1) 20 patients (group 1) who received Nimesulide-ATM at a dose of 100 mg/day for a year with interruptions during remission

2) Movalis –at a dose of 15mg / day for 15 days and pantoprazole 40 mg / day

Of the 40 RA examined patients, 33 complained of epigastric pain, 19 had dyspeptic syndrome. With FEGDS, erosive lesions of the gastric mucosa were found in 12 (60%) patients of group 1 and in 9 (45%) patients of group 2; esophagitis was found in 10 (50%) patients of group 1 and in 8 (40%) patients of group 2. Movalis is a nonsteroidal anti-inflammatory drug (NSAID), belongs to the derivatives of enolic acid and has anti-inflammatory, analgesic and antipyretic effects. Meloxicam in vivo inhibits prostaglandin synthesis at the site of inflammation to a greater extent than in the gastric mucosa or kidneys. These differences are associated with a more selective inhibition of cyclooxygenase-2 (COX-2) compared to cyclooxygenase-1 (COX-1). [6, page 9]. It is believed that inhibition of COX-2 provides the therapeutic effects of NSAIDs, whereas inhibition of the ever-present COX-1 isoenzyme may be responsible for side effects from the stomach and kidneys. The selectivity of meloxicam against COX-2 has been confirmed in various test systems, both in vitro and in vivo. The selective ability of meloxicam to inhibit COX-2 is shown when using human whole blood as a test system in vitro. It was found that meloxicam (at doses of 7.5 mg and 15 mg) inhibited COX-2 more actively, exerting a greater inhibitory effect on the production of prostaglandin E2 stimulated by lipopolysaccharide (COX-2 controlled reaction) than on the production of thromboxane involved in the blood clotting process (COX-1 controlled reaction). [7, page 21]. These effects depended on the dose. Ex vivo studies have shown that meloxicam (in doses of 7.5 mg and 15 mg) has no effect on platelet aggregation and bleeding time. In clinical studies, gastrointestinal side effects generally occurred less frequently when taking meloxicam at doses of 7.5 and 15 mg than when taking other NSAIDs with which a comparison was made. This difference in the frequency of side effects from the gastrointestinal tract is mainly due to the fact that when taking meloxicam, such phenomena as dyspepsia, vomiting, nausea, abdominal pain were less often observed. [8, page 56]. The frequency of perforations in the upper gastrointestinal tract, ulcers and bleeding associated with the use of meloxicam was low and depended on the dose of the drug [9, page 411]. For NSAID-induced gastropathies, the development of erosions (often multiple) or ulcers localized in the antrum of the stomach is typical. At the same time, with NSAID-induced gastropathies, ulcers and multiple erosions can be determined against the background of minimally pronounced mucosal changes, unlike H.pylori-associated peptic ulcer disease, in which the characteristic background of ulcers is chronic active gastritis. [10, p. 181]. It is believed that with NSAID-induced ulcers, there is often no subjective symptomatology-mute ulcers. Therefore, endoscopic examination is the only reliable method of diagnosing NSAID-induced gastropathy and monitoring anti-ulcer therapy in this pathology. NSAID-induced gastropathies occur in the early stages from the start of taking medications (1-3 months). Therefore, it is patients who start taking NSAIDs for the first time that require special



attention from the attending physician in terms of timely diagnosis of gastroduodenal complications. We chose a drug for the treatment of NSAID-induced gastropathies, pantoprazole, which has a cytoprotective effect associated with increased mucus formation in the stomach and increased bicarbonate secretion by the gastric mucosa. [11, page 146]. Having a direct effect on the parietal cells of the stomach, pantoprazole suppresses basal, nocturnal and stimulated secretion. Reduces basal (but not histamine-stimulated) pepsin production. Increases the frequency and strength of contractions of the myometrium, having a weak stimulating effect on the smooth muscles of the gastrointestinal tract. Sometimes even long courses (8 or more weeks) PPIs do not lead to scarring of such ulcers, which requires additional administration of gastroprotective drugs. [[12, page 9]. The preventive effect of PPIs may also be lower in H.pylori - negative patients. This is confirmed by the results of one of the latest studies of the preventive effect of PPIs (pantoprazole) and misoprostol in NSAID-induced gastropathies conducted in the USA (Graham D. and co., 2002). As well as the use of pantoprazole 20 mg 2 times a day, claritramycin (macrolide)500 mg 2 times a day and ampicillin 500 mg 2 times a day effectively affected stomach ulcers.

Results

1. The comparative incidence of NSAID-gastropathy in RA patients, depending on the intake of non-selective and selective nonsteroidal anti-inflammatory drugs (NSAIDs), allowed us to establish the advantage of Movalis in comparison with Nimesulide.
2. Long-term use of NSAIDs, both non-selective and selective, requires close attention of the doctor regarding the risk of gastrointestinal pathology, in particular, NSAID-gastropathy and concomitant esophageal lesion..

Therefore, it would be useful to remind that asymptomaticity is a characteristic feature (criterion) of 70-82% of NSAID—gastropathies, explained by the nonspecific analgesic and anti-inflammatory effect of these drugs, and no thorough questioning and clinical examination of the patient replace esophagogastroduodenoscopy (EGDS). [13, page 14].

Discussions

Thus, it can be argued that the drugs **movalis** and **pantoprazole** in a daily dose of 40 mg is a safe and highly effective drug of choice for the prevention and therapy of gastropathies and erosive and ulcerative changes caused by taking NSAIDs, including in elderly patients with concomitant diseases requiring medical treatment.

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