SIR Publishers
CENTER FOR INTERNATIONAL SCIENTIFIC PUBLICATIONS
JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|

ENDOSCOPIC PRESENTATION OF THE UPPER GASTROINTESTINAL TRACT WITH VARIOUS NON-STEROIDAL ANTI-INFLAMMATORY DRUGS IN PATIENTS WITH RHEUMATOID ARTHRITIS

https://doi.org/10.5281/zenodo.10250340

Djabbarova Miyassar Bobokulovna
Teshaev Shukhrat Zhumaevich.
Saidova Mukhabbat Mukhidinovna
Bukhara State Medical Institute named after Abu Ali ibn Sina
Uzbekistan Bukhara, Gizhduvansky.
Tel:+998(65) 2230050 email: info@bsmi.uz

Relevance

Rheumatoid arthritis (RA) is a chronic immunoinflammatory (autoimmune) disease manifested by progressive joint destruction, systemic inflammation of internal organs and a wide range of comorbid diseases associated with chronic inflammation, and often with undesirable drug reactions (ADR) [17]

Rheumatoid arthritis (RA) is one of the most common autoimmune diseases, the prevalence of which among the adult population of Russia is 0.5-1.5% and is constantly increasing in all age groups. It is a rheumatic disease of unknown etiology characterized by chronic erosive arthritis (synovitis) and systemic involvement of internal organs [18].

Rheumatoid arthritis (RA) is a chronic autoimmune systemic inflammatory disease of connective tissue with predominant joint involvement in the type of erosive-destructive progressive polyarthritis. Around 58 million people suffer worldwide [16].

The main method of diagnosing NSAIDs-gastropathy is endoscopic examination - esophagogastroduodenoscopy (EGDS). It is indicated by all patients taking NSAIDs if they show any signs of gastrointestinal damage, or there are risk factors for NSAIDs-gastropathy [10].

Acute, usually multiple, gastroduodenal erosions and/or ulcers with preferential localization in the antrum of the stomach in the absence of local inflammation and histological signs of gastritis are characteristic clinical and endoscopic features that arise against the background of course administration of NSAIDs. In general, endoscopic signs of upper gastrointestinal mucosa damage of varying severity, ranging from swelling and hyperemia to the formation of petechiae, erosions and ulcers, are detected in 30-50% of patients taking NSAIDs [12].

SIR Publishers
CENTER FOR INTERNATIONAL SCIENTIFIC PUBLICATIONS
JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|

Detection of erosions and ulcers of the gastric and/or duodenal mucosa, including asymptomatic ones, is of important clinical importance. After all, the source of most of the dangerous gastrointestinal bleeding is precisely ulcers or multiple erosions. In addition, the mechanisms for the development of NSAID-induced erosions and ulcers and ventricular bleeding are essentially the same. This makes it possible to consider endoscopic changes in the gastrointestinal tract as a "surrogate marker" of a more dangerous pathology [10].

Purpose

The purpose of the study was to compare the frequency of erosions and ulcers of the stomach and/or duodenum detected in EGDS while taking various NSAIDs.

Subject and Subjects

We collected data from upper gastrointestinal fibroscopy from May 2018 to December 2022 at the Republican Scientific Center for Emergency Medical Care (RNCEMP) Bukhara Branch of 251 patients with RA, of whom all patients underwent upper gastrointestinal fibroscopy. Gastric mucosal erosion and ulcer were classified using a modified LANCA scale. We analyzed these data with multiple regression analyses. Written informed consent of subjects was obtained prior to fibroscopy. They met the revised 1987 RA classification criteria.

Clinical Data Collection

We extracted the following data from medical records: age, sex, duration of RA disease, Steinbroker X-ray stage and functional class scores. We also assessed the history of patient medication associated with mucosal damage to the gastroduodenal region. These drugs were NSAIDs, including meloxicam (10 mg daily), diclofenac (75 mg daily), and prednisolone (30 mg daily). The necessary medications were not included. Meloxicam are also COX-2 selective NSAIDs; including omeprazole, an H2-histamine receptor blocker including famotidine and ranitidine; gastroprotective drugs, including sucralfate, and dicyclomin, and oral corticosteroids (based on milligrams of prednisolone per day).

Statistical analysis

To calculate independent risk factors for the modified LANCA score, we performed a single regression analysis using the Pearson correlation coefficient with significance at $p < 0.1$. An adjusted multiple regression analysis was then performed. The validity of differences between the two groups was determined by Student's t-test. The validity of differences between the four groups was determined by one-sided analysis of variance (ANOVA) followed by Tukey-Kramer test.

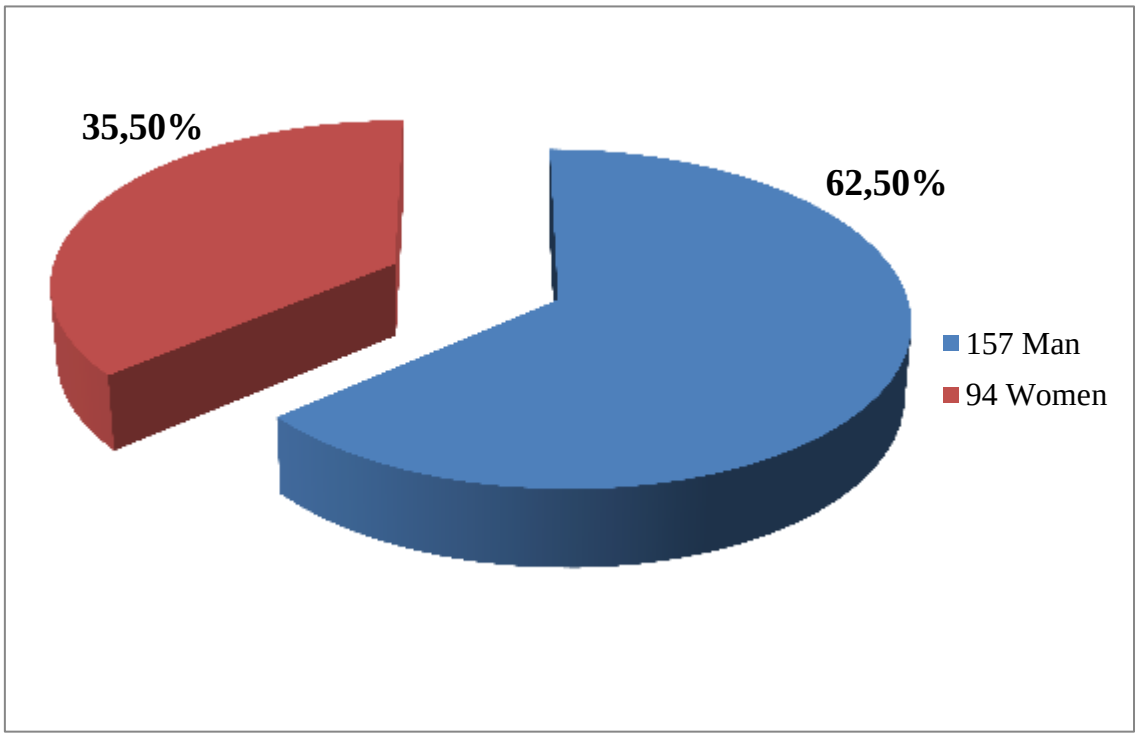
Results

The prevalence of endoscopic damage to the gastric and duodenal mucosa in these RA patients was 60,2% (151 cases). Multiple regression analyses showed that

SIR Publishers
CENTER FOR INTERNATIONAL SCIENTIFIC PUBLICATIONS
JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|

prednisolone (PSL), NSAIDs, and proton pump inhibitors (PPIs) were independent risk factors associated with the modified LANCA score. PSL and NSAIDs correlated positively with score, while PPI intake was inversely correlated with score. The modified LANCA score in RA patients treated with both PSL and NSAIDs was significantly higher than in patients treated with PSL alone (without NSAIDs). Patient characteristics and prevalence of gastric mucosal damage A total of 251 RA patients were included in this study. The majority of these patients were male 157 (62,5%), 94 female (37,5%), the median age was 69,.3 years, and the median duration of RA disease was 18,7 years.

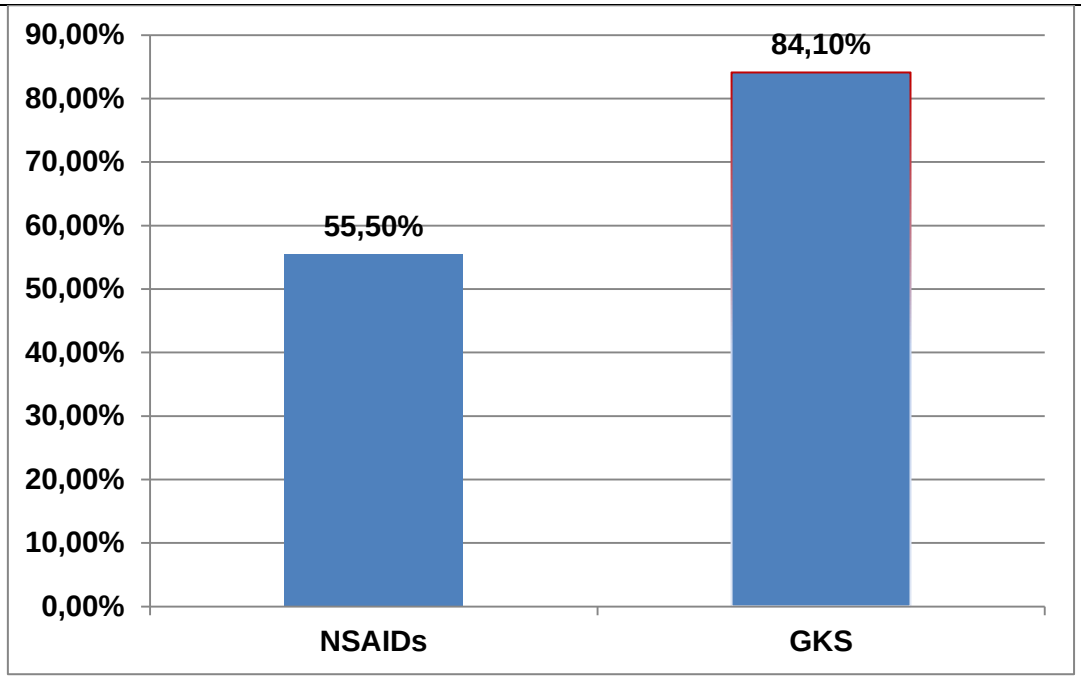
Chart 1



Among these patients, 55% (122 cases) received NSAIDs and 44,5% (98 cases) received corticosteroids. The mean oral corticosteroid dose was 3,7 mg prednisolone (PSL) per day and 37,7% (85 cases) were gastroprotective drugs.

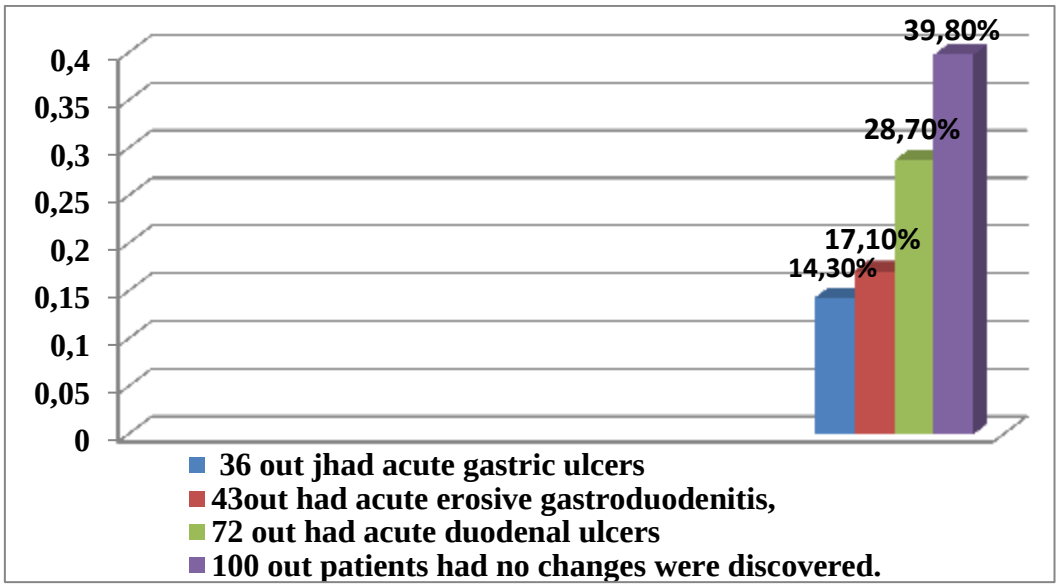
Chart 2

JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|



When examining patients with suspected RA and gastropathy in the FGDS, 36 of 251 patients (14,3%) had acute gastric ulcers, 43 (17,1%) had acute erosive gastroduodenitis, 72 (28,7%) had acute duodenal ulcers, and the remaining 100 (39,8%) had no changes.

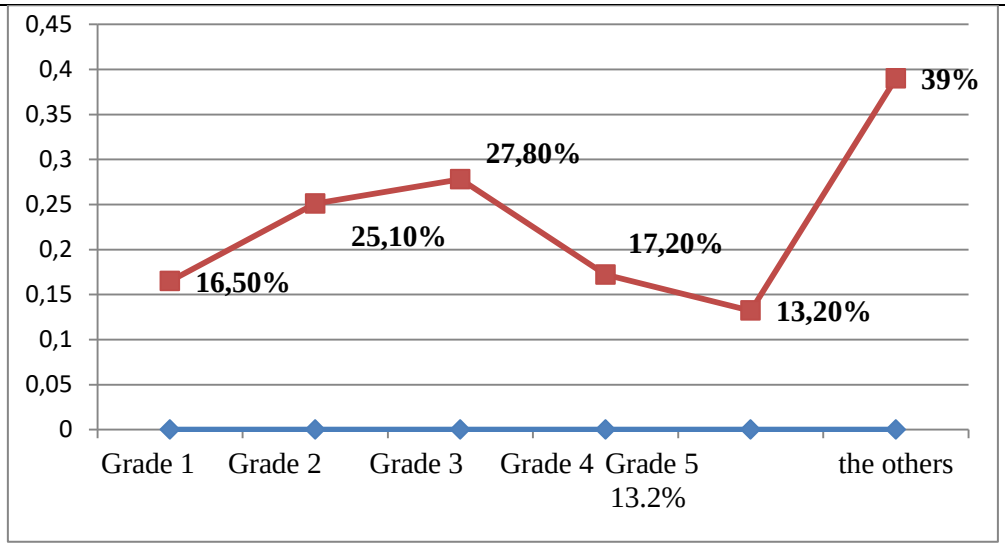
Chart 3



The prevalence and severity of gastric and duodenal mucosal damage in these RA patients were as follows: Grade 1- 16,5% (25 cases), Grade 2- 25,1% (38 cases) Grade 3- 27,8% (42 cases) of Grade 4 -17,2% (26 cases) and. Grade 5 13,2% (20 cases)

Chart 4

SIR Publishers
CENTER FOR INTERNATIONAL SCIENTIFIC PUBLICATIONS
JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|



Conclusions

Our results suggest that GCS and NSAIDs were factors exacerbating gastric mucosal damage, while PPI use was a protective factor. In addition, the combined use of corticosteroids and NSAIDs can provoke the development of stomach ulcers. In most cases, NSAID-gastropathy was not accompanied by pronounced subjective symptoms, which made it difficult to diagnose it in a timely manner. Obviously, such patients have a risk of developing life-threatening complications, such as gastrointestinal bleeding, while continuing to take NSAIDs without additional prevention methods. In this regard, it is necessary to train doctors in methods for assessing the risk and control of gastrointestinal complications associated with the use of NSAIDs

.

LITERATURE USED:

1. A.E. Karateev et al. Clinical Guidelines "Rational Use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in Clinical Practice "//Modern Rheumatology, 2015. № 1. S. 4-41.
2. A.E. Karateev et al. Clinical Guidelines "Rational Use of Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) in Clinical Practice "//Modern Rheumatology, 2015. № 1. S. 4-41.
3. Akulova A.I., Gaidukova I.Z., Aparkina A.V., Rebrov A.P. Defeat of the gastrointestinal tract in rheumatic diseases. experimental and clinical gastroenterology | issue 130 | № 6 2016. Page 69-73.
4. Balukova. E.V. NSAID-induced gastropathy: from understanding the mechanisms of development to developing a strategy for prevention and treatment. BC, 2 017 NO. 10. Page 697-700.

5. Dikareva. E.A., E.V. Makarenko, S.I. Pimanov. Predicting the development of gastropathy induced by nonsteroidal anti-inflammatory drugs in patients with rheumatoid arthritis. VGMU Bulletin. – 2015. - Volume 14, No. 5. - S. 46-56.

6. Dovgan. E.V. Non-steroidal anti-inflammatory drugs: safety issues. Effective pharmacotherapy. 2021. Rheumatology, traumatology and orthopedics. Pages 6-12.

7. Iskakov. BS, AB Kulembaeva, G.S. Yesirkepova. NSAID-induced gastropathies in rheumatological practice: current issues of diagnosis and treatment. Bulletin of KazNMU No. 2-2018.

8. Kalagova A.V.1, Aylarova N.R.2, Panagov Z.G. NSAIDs-gastropathy in patients with rheumatoid arthritis. Bulletin of Science and Education No. 1 (55). Part 1. 2019. Page 97-99.

9. Kalagova A.V.1, Aylarova N.R.2, Panagov Z.G. NSAIDs-gastropathy in patients with rheumatoid arthritis. Bulletin of Science and Education No. 1 (55). Part 1. 2019. Page 97-99.

10. Karateev A.E., E.Yu. Pogozheva, E.S. Filatova, V.N. Amirdzhanova. Endoscopic picture of the upper gastrointestinal tract while taking various non-steroidal anti-inflammatory drugs.

11. Karateev A.E., E.Yu. Pogozheva, E.S. Filatova, V.N. Amirdzhanova. Endoscopic picture of the upper gastrointestinal tract while taking various non-steroidal anti-inflammatory drugs..

12. Karateev A.E., Gontarenko N.V., Tsurgan A.V. Comorbid pathology of the digestive system in patients with rheumatic diseases: not only NSAID-gastropathy. Scientific and practical rheumatology. 2016(54)4:382–389.

13. Karateev A.E., Gontarenko N.V., Tsurgan A.V. Comorbid pathology of the digestive system in patients with rheumatic diseases: not only NSAID-gastropathy. Scientific and practical rheumatology. 2016(54)4:382–389.

14. Karimov M. Sh. Some indicators of the pharmacokinetics of diclofenac sodium in patients with rheumatoid arthritis, taking into account comorbid conditions: scientific publication/M. Sh. Karimov, N. Kh. Tukhtaev, M. V. Sibirkin//Therapeutic Bulletin of Uzbekistan/scientific and practical journal: CJSC SEAL MAG. - 2020. - N 2. - C. 120-125 (Code T15/2020/2).

15. Lidia La Barbera, Chiara Rizzo, Giulia Grasso, Federica Macaluso, Federica Camarda, Francesco Ciccia and Giuliana Guggino. The Cross-Talk between Microbiome and Metabolome in Rheumatoid Arthritis. BioChem 2023, 3, 47–60.

16. Mirzoev. S.Z, Rasulov. U.R., M.N. Rakhmatulloeva, G.S. Pardaev. Evaluation of treatment effectiveness in patients with rheumatoid arthritis.

JOURNAL OF APPLIED MEDICAL SCIENCES
ISSN(Online): 2984-6730
SJIF Impact Factor |(2023): 5.817|
Volume-6, Issue-4, Published |20-11-2023|

Scientific and medical journal "Bulletin of Avicenna" No. 1, January-March 2013. Str.90-93.

17. Nasonov. E.L. Tofacitinib in rheumatoid arthritis: What's new? CLINICAL PHARMACOLOGY AND THERAPY. 2020, 1-4.

18. Reshetko O.V, Levitan AI, Suleymanova RR. Gastro-safety of rheumatoid arthritis pharmacotherapy. experimental and clinical gastroenterology | issue 157 | No. 9 2018/pp.76-80.

19. Smolen, J. S., Aletaha, D., and McInnes, I. B. Rheumatoid arthritis. Lancet. 22 March 2017