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COMPARATIVE EFFECTIVENESS OF NIMESULIDE AND DICLOFENAC SODIUM IN GOUT

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Abstract. 40 patients with gout (7 females and 33 males) were included in the study to assess the rate of onset of the analgesic effect of a non-steroidal antiinflammatory drug (NSAID). The patients were divided into 2 groups. The 1st main group included 20 patients with gout who received tablet namesulide (drug "Aponil") 100 mg 2 times a day. To compare the effectiveness of nimesulide, patients of group 2 (control group) were given a drug from the group of non-selective NSAIDs diclofenac sodium 75 mg 2 times a day. The duration of the drugs was 7 days. The most effective in terms of the speed and severity of the analgesic effect was nimesulide in tablet form, since after 20 minutes - in 7, after 40 minutes - in 13 patients pain in the joints decreased, and after an hour 16 patients of the 1st group rated the effect as good, while in 6 of them the pain decreased significantly. In the 2nd group, only 3 patients indicated any decrease in pain only after 1-1.5 hours. Thus, in group 1, all patients noted the analgesic and anti - inflammatory effect of nimesulide tablets. In group 2, only two patients noted the effect of diclofenac. Nimesulide stopped an attack of arthritis in 9 (45%) patients of the 1st group, in 2 (10%) - of the 2nd group.

Keywords: Eradication, H. pylori, anti-Helicobacter therapy, relapse.

Nimesulide was developed in 1980 and after 5 years is available in more than 50 countries under various names, and by 1999 in a number of countries it occupied the first or second position among all non-steroidal anti-inflammatory drugs (NSAIDs). The Hungarian Society for Experimental and Clinical Pharmacology recognized nimesulide as a drug of 2000 x [1-5].

Many studies have confirmed the anti-inflammatory analgesic and antipyretic activity of nimesulide in a wide range of human disease conditions: arthritis, musculoskeletal inflammation, headache, dental, otolaryngological and oncological pain, gynecological and urological problems, postoperative conditions, respiratory tract infections, phlebitis and thrombosis. Nimesulide belongs to the class of sulfonanilides and is one of the first NSAIDs on the pharmaceutical market that selectively inhibits the isoenzyme cyclooxygenase-2 (COX-2). The presence in the nimesulide molecule of the methyl sulfonic group makes it neutral and thus safer for the gastric mucosa compared to NSAIDs that have a carboxyl or ketoenolate group that creates an acidic environment [6-15].

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The aim of our study was to study the rate of onset of the analgesic and antiinflammatory effect of nimesulide in gouty inflammation and in a comparative aspect with the non-selective non-steroid diclofenac sodium.

Materials and methods. 40 patients with gout (7 females and 33 males) were included in the study to assess the rate of onset of the analgesic effect of a non-steroidal anti-inflammatory drug (NSAID). The patients were divided into 2 groups. The 1st main group included 20 patients with gout who received tablet namesulide (drug "Aponil") 100 mg 2 times a day. To compare the effectiveness of nimesulide, patients of group 2 (control group) were given a drug from the group of non-selective NSAIDs - diclofenac sodium 75 mg 2 times a day. The duration of the drugs was 7 days.

Results and discussion. The most effective in terms of the speed and severity of the analgesic effect was nimesulide in tablet form, since after 20 minutes - in 7, after 40 minutes - in 13 patients pain in the joints decreased, and after an hour 16 patients of the 1st group rated the effect as good, while in 6 of them the pain decreased significantly. In the 2nd group, only 3 patients indicated any decrease in pain only after 1-1.5 hours. Thus, in group 1, all patients noted the analgesic and anti-inflammatory effect of nimesulide tablets. In group 2, only two patients noted the effect of diclofenac. Nimesulide stopped an attack of arthritis in 9 (45%) patients of the 1st group, in 2 (10%) - of the 2nd group.

Thus, a comparison of the clinical efficacy of nimesulide and diclofenac tablets in the relief of an acute attack of gout showed the advantage of nimesulide in the rate of arthrosis, cancer, thrombophlebitis, in dentistry, in dysmenorrhea, in general surgical practice in adults and children. It has been shown that during surgical dental interventions and dysmenorrhea, the analytical effect of nimesulide occurs within 20-30 minutes. This is extremely important in acute pain, such as headache or toothache.

Conclusions. Nimesulide has analgesic, antipyretic and anti-inflammatory activity in respiratory tract infections, otorhinolaryngological diseases and injuries in adults and children.

References

- 1. Dalbeth N., Merriman T.R., Stamp L.K. Gout Lancet. 2016;388(10055):2039–2052.
- 2. Emmerson B.T. The management of gout. New Engl J Med. 1996;334(7):445–451.
- 3. Pascual E., Sivera F. Time required for disappearance of urate crystals from synovial fluid after successful hypouricaemic treatment relates to the duration of gout. Ann Rheum Dis. 2007;66(8):1056–1058.
- 4. Singh J.A. Challenges faced by patients in gout treatment: a qualitative study. J Clin Rheumatol: Practical Rep Rheum Musculoskelet Dis. 2014;20(3):172–174.
- 5. Kuo C.F., Grainge M.J., Zhang W., Doherty M. Global epidemiology of gout:

http://www.ajpbr.org/

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prevalence, incidence and risk factors. Nat Rev Rheumatol. 2015;11(11):649–662.

- 6. Abdullayev R. B., Makhmudova L.I. Features of Chemical Elements in Various Forms of Irritable Bowel Syndrome // Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 2, 2021, Pages. 2993 3000.
- 7. Abdullayev R.B., Makhmudova L.I. Micro elemental imbalance in irritable bowel syndrome and IBS correction. Academicia. Vol. 11, Issue 5, May 2021:655-662.
- 8. Abdullayev R.B., Makhmudova L.I., (2021). Assessment Of Clinical And Psychological Status And Quality Of Life Of Patients In Different Forms Of Irritable Bowel Syndrome. The American Journal of Medical Sciences and Pharmaceutical Research, 3(02), 127-134.
- 9. Makhmudova L.I, Akhmedova N.Sh. Irritable bowel syndrome: a new look at the problem // Academicia. 10.5958/2249-7137.2020.00983.0. 433-38.
- 10. Makhmudova L.I., Akhmedova N.Sh., Ergashov B.B. Clinical manifestation of irritable bowel syndrome. Art of medicine. International medical scientific journal. Vol. 1, Issue 2. 2021:24-33.
- 11. Makhmudova L.I., Ismatova M.N., Mukhamedjanova M.H., Sulaymonova G.A. Evaluation of microelement status and IBS correction with irritable bowel syndrome. New day in medicine. 2(34) 2021:325-331.
- 12. Makhmudova L.I., Shazhanova N.S., Akhmedova N.Sh., (2021). Clinical Features Of Irritable Intestinal Syndrome. The American Journal of Medical Sciences and Pharmaceutical Research, 3(04), 154-159.
- 13. Makhmudova L.I., Sharipov J.N. State of intestinal microflora in irritable bowel syndrome. Tematics journal microbiology. Vol.6, Issue 1. 2022:104-109.
- 14. Umurova NM. Structure of Hollinosis Incidence in Bukhara Region. Middle european scientific bulletin. Vol 22. Mar 2022. P.178-184.
- 15. Umurova NM. Effective scheme of anti-ulcer therapy in the eradication of h.pylori infection. AJPBR. Volume 11 Issue 3. 2022. P.59-61.