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MANIFESTATIONS OF NSAID-GASTRODUODENOPATHY IN PATIENTS WITH KNEE OSTEOARTHRITIS. (LITERATURE REVIEW)

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Article history:		Abstract:
Received:	February 1st 2023	The article presents the effect of non-steroidal anti-inflammatory drugs
Accepted:	March 1st 2023	(NSAIDs) on the gastrointestinal tract (GIT) and the pathogenesis of
Published:	April 6 th 2023	gastroduodenopathy in patients with knee osteoarthritis (KOA).
Keywords: osteoarthritis, gonarthrosis, non-steroidal anti-inflammatory drugs, gastroduodenopathy.		

INTRODUCTION. Osteoarthritis (OA) is the most common rheumatic disease in Uzbekistan, which leads to a violation of the structure and functional ability of the musculoskeletal system and represents a major medical and social problem.

This disease is the result of a complex set of degenerative and reparative processes localized in cartilage and subchondral bone, combined with synovitis. Gonarthrosis (OA of the knee joint) is the second most common localization of OA among the population [1].

In one of the last large studies on the epidemiology of OA in Europe (Zoetermeer Community Servey), the prevalence of OA of the knee joint according to radiographic data was 14,100/100 thousand in men and 22,800/100 thousand in women over 45 years of age. Mechanical, biochemical, and genetic factors, as well as inflammation, which is localized in the subchondral bone, hyaline cartilage, synovial membrane, and periarticular soft tissues, are involved in the development and progression of OA) [2]. The primary pathogenic factors of OA, including the knee joint, include insufficient synthesis of proteoglycans in the affected cartilage, fragmentation and a decrease in the content of proteoglycan aggregates, catabolism, an increase in superoxide radicals, activation of collagenase and phospholipase A2, reduced synthesis of hyaluronic acid by synoviocytes B, hyper production of interleukin (IL) 1 and tumor necrosis factor a, as well as hyper production of prostaglandin (PG) E2. These pathogenetic factors lead to cartilage damage with a decrease in its volume, the formation of osteophytes, sclerosis of the subchondral bone, and fibrosis of the articular capsule [1]. The main symptom is pain of a mechanical nature that occurs when walking, especially stairs. Pain is localized in the anterior or inner part of the knee joint and may radiate to the lower leg [6].

Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used to treat inflammatory and degenerative diseases of the joints and spine. In this group of

patients, NSAIDs are used in high doses for a long time, which increases the risk of complications from the gastrointestinal tract (92.6%) [3, 4, 5]. According to different authors, the frequency of NSAID-associated gastroduodenal erosions and ulcers reaches 10-70% [4, 8, 10, 11, 12]. It should be noted that it is elderly patients with OA who are most sensitive to the gastrotoxic effect of NSAIDs [7, 9, 10]. NSAIDs in OA are indicated due to the persistence of synovitis from the earliest stages of the disease, especially when local therapy and paracetamol are ineffective. As a rule, the terms of taking drugs are limited, taking into account their possible chondrotoxic effect and the risk of inducing erosive and ulcerative lesions of the stomach and duodenum, but the risk of NSAID gastropathy is especially high in the first month of treatment [13, 11, 12]. According to Zimmerman Ya.S. (2008) constantly take NSAIDs at least 68.5% of patients with rheumatoid

An analysis of the literature indicates the debatability of such aspects of the problem as the recognition of the "actually ulcerogenic" properties of NSAIDs, the ratio of local and systemic mechanisms of the pathogenesis of gastropathy, the role of concomitant helicobacteriosis and the expediency of eradication, the significance of the endocrine-immune characteristics of the patient in terms of drug tolerance. It is of interest to study the between NSAID-associated relationship ulcerative (gastropathy) and inflammatory (gastritis) changes in the mucous membrane (SO) of the gastroduodenal zone (GDZ), the typical localization and significance of the timing of damage, prognosis of complications, the feasibility of prophylactic use of antisecretory and antacid drugs [7, 12, 14, 15].

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