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The Choice Of An Optimal Nonsteroidal Anti-Inflammatory Agent For Relieving Pain In Diseases Of The Temporomandibular Joint.

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ABSTRACT

During the clinical study, a sociological survey was conducted by interviewing 98 patients of various age groups who were treated on an outpatient basis at the Regional Dental Polyclinic of Samarkand with temporomandibular joint pathologies. The purpose of our study was to study the features of their use of nonsteroidal anti-inflammatory drugs to relieve pain in diseases of the temporomandibular joint.

Keywords:	pain syndrome, nonsteroidal anti-inflammatory drugs, diseases of
	the temporomandibular joint.

Introduction: The temporomandibular joint is a joint located in front of the ear and consists of the temporal bone and the mandible. The tendons and muscles of the joint allow the jaw to open and close. If they are healthy, moving the jaw, the person does not experience any discomfort.

Causes of diseases

Diseases of the temporomandibular joint have the following causes:

Malocclusion

Stress (overexertion, severe teeth compression) Jaw injury (fractures of the facial bones and jaw) Endocrine, metabolic disorders, infectious diseases

Excessive physical activity

Bad habits (biting nails, holding the phone incorrectly, etc.).

Symptoms:

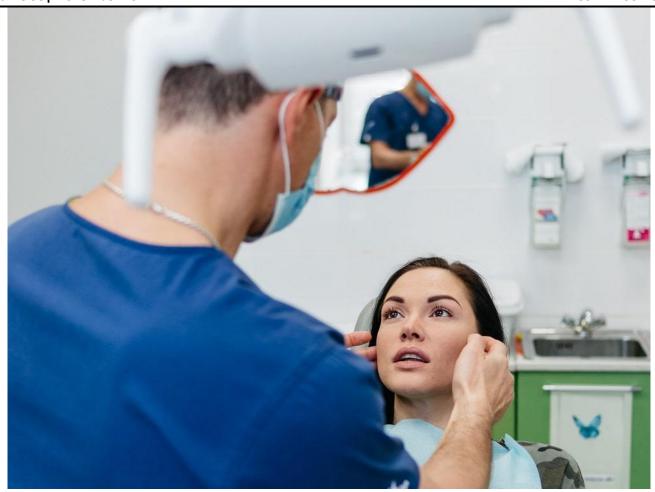
Symptoms of diseases of the temporomandibular joint:

Headache, spasms in the facial muscles and jaw area

Clicks, crunching, grinding when moving the jaw Pain, congestion and ringing in the ears Enlargement of submandibular lymph nodes Dizziness

The most common diseases of the temporomandibular joint are joint dysfunction, dislocation, arthrosis, arthritis (acute and chronic), ankylosis, neoplasms.

Diseases of the temporomandibular joint are very often complications of various dental diseases. Very often, these diseases, for example, can be caused by various malocclusion abnormalities.



Types of diseases of the temporomandibular joint.

The most common diseases of the temporomandibular joint are:

Dislocation of the joint. It is the result of a violation of the relative position of the jaws in muscular disorders. It is accompanied by clicks, pain when opening the mouth, displacement of the components of the joint (head and disc).

Arthritis. Acute arthritis is characterized by pain in the temporomandibular joint, limited movement of the mandible, swelling of the joint, and an increase in body temperature.

Chronic arthritis is characterized by pain and crunching when the TMJ moves. A violation of the function of the temporomandibular joint is revealed in the third week of the disease. With the progression of the disease, joint deformity may occur.

Osteoarthritis. It is characterized by a violation in the movement of the jaw (zigzag movement of the lower jaw when opening the mouth), pain in the joint, ears, and chewing muscles. Clicks and

crunches appear when moving. Arthrosis is associated with injuries, inflammation, and metabolic disorders.

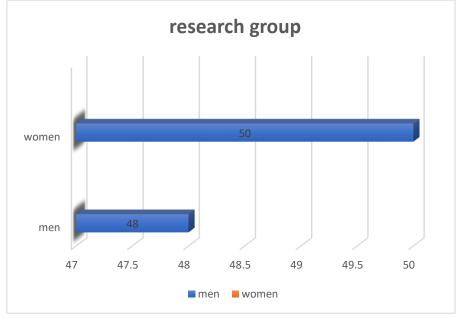
Ankylosis. It is caused by injuries and infectious diseases. The main symptom is the restriction of movement of the lower jaw. In the case of purulent ankylosis in childhood, facial asymmetry, malocclusion, and numerous caries appear. With persistent changes in the joint, complete loss of movement may occur.

Musculoskeletal dysfunction. It is characterized by pain in the temporal region and ear, increasing during chewing, blocking of the lower jaw, clicks during jaw movement, facial asymmetry. It can be explained by endocrine and psychoemotional factors. It leads to the development of osteoarthritis.

Radiography is of great importance for the diagnosis of temporomandibular joint disease, which determines the structure of the joint and its disorders.

Nonsteroidal anti-inflammatory drugs (NSAIDs) occupy the first place among drugs for

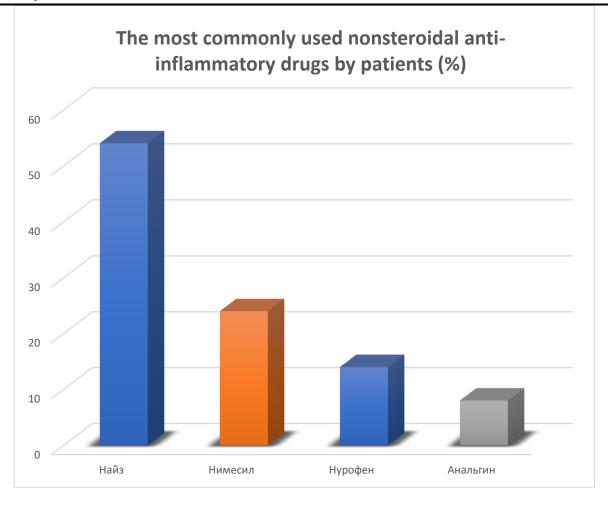
pain relief in dental practice. The aim of the study was to evaluate the preferences, procedure and features of taking nonsteroidal anti-inflammatory drugs by patients for pain relief in dental practice for pain relief in diseases of the temporomandibular joint. Materials and methods of the study: During the clinical study, a sociological survey was conducted by questioning 98 patients of 48 men of the comparison group aged 20 to 46 years and 50 women aged 20 to 46 years who were treated on an outpatient basis at the Regional Dental Clinic.



The dentists were asked 16 questions in the questionnaire. Of these, 10 questions were related to their professional knowledge regarding the mechanism of action, efficacy, side effects, and pharmacodynamics of prescribed nonsteroidal anti-inflammatory drugs for pain relief in diseases of the temporomandibular joint. Four questions were devoted to the preferences of dentists in choosing certain nonsteroidal anti-inflammatory drugs for relieving pain syndrome in diseases of the temporomandibular joint in their clinical practice, and 2 questions – at the place of obtaining knowledge on the use of non-steroidal

anti-inflammatory drugs, as well as the most effective improvement of their knowledge.

The result of the study: The analysis of the survey results made it possible to clarify the preferences of patients choosing nonsteroidal anti-inflammatory drugs for relieving pain in diseases of the temporomandibular joint in everyday life. Most often, when pain occurs, the surveyed patients take Nise – 54%. Nimesil is used to relieve pain in 24% of patients. To a lesser extent, they take Nurofen – 14% and Analgin – 8%.



Most patients, following the recommendations, purchase exactly the drug that was prescribed by the attending physician. The remaining respondents either use a similar drug that they have in their home medicine cabinet, or purchase a similar drug. The analysis of the results of the survey of dentists made it possible to clarify the level of their awareness of pharmacokinetics and pharmacodynamics, as well as the specifics of the use of nonsteroidal anti-inflammatory drugs for pain relief in dental practice. The interviewed dentists correctly indicated that nonsteroidal anti-inflammatory drugs inhibit the formation of prostaglandins. Dentists were more aware of the side effects that nonsteroidal anti-inflammatory drugs can cause. Conclusion: Based on the conducted research, it is possible to testify to a high level of knowledge and awareness of dentists in the clinical use of nonsteroidal anti-inflammatory drugs to eliminate pain in dental practice. More than 90% of dentists for pain relief currently cyclooxygenase-2 prefer inhibitor

pronounced selectivity, in particular etoricoxib, for pain relief in their clinical practice.

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