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DENTAL STATUS AND COMPREHENSIVE ORTHOPEDIC CARE FOR PATIENTS SUFFERING FROM EPILEPSY

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Abstract
In order to develop recommendations for prosthetics in patients suffering from epilepsy, a study of the condition of existing prostheses was conducted, and the existing prosthetic protocols for such patients were studied. It was revealed that when prosthetizing such patients, they adhere to the prosthetics protocols of somatically healthy patients, and the condition of existing prostheses is recognized as unsatisfactory and has indications for replacement.

Keywords: Epilepsy, prosthetics, prosthesis.

Introduction

Current:

Currently, the study of dental pathology in patients with mental and psychosomatic disorders is becoming increasingly relevant. Treatment of mentally ill patients is based on lifelong use of psychotropic drugs (neuroleptics, anticonvulsants, antidepressants, etc.), which alter the functions of the autonomic nervous system and cause metabolic and endocrine disorders.

Research is being actively conducted worldwide aimed at optimal selection of dental prostheses for epilepsy patients, with a tendency towards the use of non-removable structures. However, this issue remains little studied, despite its importance for practice, as not in all cases is it possible to use permanent dentures. At the same time, it is crucial to investigate the possibilities of various dental prosthetic designs and adaptation mechanisms to them, as well as to track changes in reflexes to the prosthesis as to a foreign body, which will help determine the attitude of patients with epilepsy towards the prosthesis.

Thus, to date, there are no specific protocols for prosthetics of this group of patients, and the existence of a large group of patients, whose prosthetics cannot be performed only using non-removable structures, exacerbates the situation. Also, the oral hygiene status of patients suffering from epilepsy who have undergone removable dentures is at an unsatisfactory level. All this gives us the right to assert the relevance of this topic.

Materials and methods:

The study involved 105 patients divided into 2 groups. The first (control) group consisted of 48 somatically healthy patients, with a gender ratio of 31 women to 17 men.

The second (main) group consisted of 57 patients with epilepsy, with a gender ratio in this group of 32 women to 25 men.

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All participants underwent a dental examination, which revealed the following:

Among individuals using dental bridges (including those using both single crowns and dental bridges), out of 75 prosthetic units, 32 (42.67%) met functional and aesthetic requirements. The remaining 43 units (57.33%) were deemed unsuitable due to occlusion disorders, improper fit between the bridge (or cantilever) body and the alveolar ridge mucosa, detachment of plastic facings from the bridge body, poor fit between the gingival pocket mucosa and the edge of the supporting crowns, and other reasons.

Figure 1: Condition of old fixed dental prostheses in patients with epilepsy

Among individuals who used partial removable dentures (including those who used single crowns and bridge prostheses), out of 18 prosthetic units (for 12 people), 11 units (61.1%) did not meet functional and aesthetic requirements.

Among individuals who used complete removable dentures, out of 22 prosthetic units (for 15 people), only 4 units (18.1894%) met functional and aesthetic requirements, while the rest needed to be replaced with new ones.

Patients poorly observed oral hygiene and prosthetics. Numerous deposits and dirt were noted on the surfaces of the prostheses, and an unpleasant odor was observed. These patients underwent the following treatment:

Orthopedic treatment with fixed dental prostheses was carried out in 38 (55.4%) patients. A total of 84 bridge prostheses were fabricated.

The frequency of the need for removable prostheses increased as the duration of the underlying disease increased.

The choice of prosthetic design was determined by the degree of predisposition of periodontal tissues and oral mucosa to pathological changes.

Orthopedic treatment was performed on 43 (62.3%) patients. In this case, we performed selective tooth grinding in 23 patients and fabricated 84 bridge prostheses. 32 patients were fitted with removable (partial and complete) plate dentures.

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Figure 2: Condition of partially removable and fully removable dentures in patients suffering from epilepsy.

Figure 3: Made removable dentures for a patient suffering from epilepsy.

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The use of solid cast bridge prostheses, partial plate prostheses using splinting elements for separately standing or weakened groups of teeth is justified in patients with internal organ diseases.

When choosing prosthetic structures, the data of dental status and functional research methods were used: gnathodynamometry of the supporting teeth, thermometry, determination of pathological mobility of teeth, radiography of teeth and jaws.

In addition, a set of general and local measures for protective care and oral health maintenance was developed:

Among the general ones, we included replacing the used psychotropic drugs with "Trioxazine" and "Predizin," which have fewer side effects. We also prescribed the drug "Osteogenon" to maintain the overall level of jaw bone tissue.

For local use, we prescribed "Elyudril" for flushing, to maintain oral hygiene, "Parodium" for local application to the mucous membrane, to improve blood circulation and antiseptic effect on the prosthetic bed, "Elgidium" for daily use during tooth cleaning, to comprehensively care for the oral cavity.

In the control group of patients, prosthetics were performed according to the standard protocol based on the clinical condition of the patients' oral cavity.

Research results:

When observing patients after replacing unsatisfactory structures with new ones, as well as prosthetizing the remaining defects of the dental rows, both in the control group and in the main group of patients, an improvement in the quality of life was noted.

References:

1. Popova, I. A., and A. H. Mashuryan. "Individual approach to the choice of dental manipulations in epilepsy patients." Medical Internet Conference Bulletin. Vol. No. 7. Science and Innovation Limited Liability Company, 2018.

2. Salimov, O. R., M. B. Mahmudov. "Ginger Enlargement and Convulsive Oral Trauma in Patients with Epilepsy." Integrative Dentistry and Maxillofacial Surgery 1.2 (2022): 207-209.

3. Salimov O. R. et al. Disorders of oral cavity biology in patients,
// Journal of Interdisciplinary Innovations and Research in Uzbekistan. - 2023. - Vol. 2. - No. 15. - P. 610-623.

4. Babich, V. V. "The complexity and strategy of treating dental patients with epilepsy." Clinical Dentistry 24.2 (2021): 111-115.

5. Gilmanova N.S. Adaptation to complete removable dentures of middle-aged individuals depending on their psycho-emotional status: scientific publication /N.S. Gilmanova, E.V. Orestova, I.A. Voronov // Ros. dental journal. - M., 2007. No3. - P. 26-29.

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