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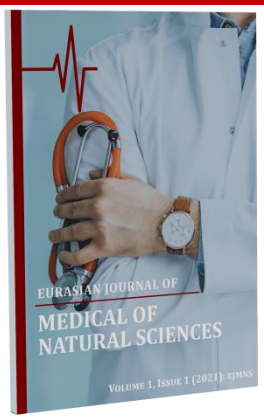

ANALYSIS OF OCCLUSIOGRAPHY IN ELDERLY PATIENTS WITH VARIOUS TYPES DENTAL DEFECTS

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ABSTRACT

Dentistry is one of the most dynamically developing medical sciences. New concepts and approaches to providing dental care and conducting comprehensive diagnostics of dental diseases are presented annually at scientific congresses and conferences at various levels. However, a number of traditional methods and approaches to complex diagnostics of the dental system remain relevant to this day. The presented article is devoted to assessing the relevance and practical application of occlusiography techniques in elderly patients with dentition defects of varying extent.

PURPOSE: Determination of occlusiography in elderly patients with various types of dentition defects and its analysis.

MATERIALS AND METHODS: The study is based on the determination and analysis of occlusal-graphic data in elderly patients. A total of 150 patients were included in the study and were divided into three groups. Group 1 - patients with terminal defects (unilateral and bilateral). Group 2 -patients with included defects (unilateral and bilateral). Group 3 - patients with combined defects.(terminal and included). There were 50 patients in each group. Computer occlusionography and Traditional occlusionography was performed. The author's method was used - a program for photomorphometric analysis of control and diagnostic models.

RESULTS: In group 1 there is a high dependence on the results of the author's method of digital analysis, occlusiograms for the quality of photographic images. Due to lack of chewing groups of teeth, the area of occlusal contact between the incisors and canines was considered insignificant.

The results obtained revealed a high chewing load on the frontal group of teeth in the absence of chewing function teeth. Most occlusal contacts resulted in complete loss of the wax layer on the occlusiogram. IN group 2 of the study, with the presence of teeth limiting the defect, density of occlusal contacts allowed us to obtain a true occlusiogram. As a result, 75% of respondents had a small amount supracontacts, 93% of the subjects had supracontacts inside the teeth, limiting the dentition defect.

At the same time, the preserved teeth helped to obtain a high-quality imprint of the occlusal relief on the analogue wax plate, which made it possible to obtain maximum similarity of results with the patented method and the T-scan computer system (90%). In group 3, the wax template was additionally reinforced occlusal wax in the area of terminal dentition defect. 85% of patients had supracontacts located in the area of defects in the dentition, significant violations of the position of the teeth, limiting terminal defects were noted. The reason for this may be vertical loads during chewing. In this group the average deviation of the results of analogue occlusion from digital was 87.5%.

Conclusions. At the diagnostic stage, it is recommended to use occlusion in all cases dental specialties.

One of the most pressing tasks in orthopedic dentistry today, there remains the search and improvement of analysis and diagnostic methods occlusal contacts and relationships jaws. Despite the significant number existing concepts, each of which prioritizes occlusal, muscular or articular component, the question of influence remains indisputable, the patient's existing occlusal relationships on the overall picture of dental pathology. This article is devoted to one of the most common methods of diagnosis, assessment and correction of occlusal relationships of teeth - occlusiography.

Method of identification, registration and analysis of occlusal contacts is called occlusiography. A visual image of the occlusal contacts that were obtained during occlusiography is an occlusiogram. For to ensure a satisfactory outcome of orthopedic treatment. Diagnosis of occlusion is very important. One of the purposes of occlusionography is identification of premature contacts, conducting preliminary analysis occlusiography on plaster models in articulator, after which it is possible to carry out objective occlusal diagnostics in the oral cavity.

This study used the concept of biological occlusion. This concept is that working cusps of the upper and lower teeth jaw main contacts. Main principle of biomechanical balance - ensuring the physiological situation in the moment of closure of the dentition.

Using various occlusiography methods in their practice, researchers obtain information about the load, which falls on certain points of the dentition.

The use of the information obtained in the diagnosis of occlusal relationships allows largely determine the scope of further interventions in the occlusal landscape jaw surfaces.

Determining occlusal contacts using articulating paper is the most commonly used technique. Its wide distribution is due to a number of factors, namely the lack of need to purchase additional equipment and often expensive consumables for it, the speed of manipulation, the possibility of using the technique both in the oral cavity and on plaster models of jaws, a wide selection of existing copying tapes in thickness, color and form factor.

Also record the occlusiogram using wax plates. There are a significant number of approaches to registration of the occlusiogram, often for its manufacture a basic material is used wax "Belovax" (Russia), however a number of foreign companies produce specialized waxes used both for registration of central occlusion and for obtaining occlusiograms. From point of view practical application, it is most rational to divide them into foil ones containing in the center a thin gasket made of aluminum foil and non-foil ones, the plate of which is completely made of wax.

Discussion

In all comparison groups, occlusiography data were obtained that were satisfactory for analysis and comparison; a high degree of occlusal contact was achieved in 54.7% cases of research. The largest contact area was obtained in the first (33.2 ± 1.25) and third (38.8 ± 2.14) in the study group. This primarily related to character location of dentition defects, so in the case of missing lateral teeth, the area of occlusal contacts increased due to an increase in the area of imprints on the frontal group of teeth, due to their fan-shaped divergence under the influence of occlusal load, in the case of included defects this is caused by the loss of occlusal support and clear fixation maximum intertubercular contact.

The most objective data were from patients in the second study group (25.2 ± 2.23), due to the preservation of antagonist teeth in three functional groups and the preservation of occlusal support. At the same time, it was found that the most informative way to carry out occlusionography remains the method of analyzing occlusion using TScan 3, which is confirmed by data from literature sources.

When examining patients, supercontacts, temporary and force imbalance in the closure of teeth on the right and left, clamping force imbalance teeth of the anterior and lateral groups. At external examination and occlusiography using articulation paper or wax some objective factors were not found . Analysis occlusion using T-Scan 3 allowed identify additional data that are signs of compensated or decompensated disocclusion.

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