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The Relation Between Occlusion and Temporomandibular Joint Sounds

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The etiology of the occurrence of sounds and the role of occlusion, has not yet been entirely clarified.

OBJECTIVE OF INVESTIGATION: The objective of this investigation was to determine the effect of occlusal relationships on the occurrence of sounds in the TMJ.

METHODS: A group of 100 subjects, aged from 24 to 52 years (X=35.03) was examined. The existence of sounds was registered by means of a clinical examination and auscultation by stethoscope and classified according to character in click or crepitation. The number of teeth, the number of teeth in occlusion, type of occlusion (canine guided occlusion, group function and balanced occlusion) was determined by clinical examination. Overbite and overjet were measured. RCP position was determined by chin-point technique, and fixing by Lucia-jig. The sliding from RCP to IKP position was determined in the anteroposterior, vertical and latero-lateral direction. A precise calliper was used to measure movement.

RESULTS: 29% of the subjects had a clinically determined sound, in 27% it was click, and in 2% it was crepitation. The Pearson test analysis showed statistically significant difference (p<0.05) only for the occurence of crepitation in relation to the number of teeth, number of teeth in occlusion and overjet. The same was confirmed by analysis of variance (ANOVA).

CONCLUSION: Overjet, difference in the position of RCP-ICP sliding from RCP into ICP, and type of occlusion, i.e. mediotrusion interference, do not have an influence on the occurrence of sound in the TMJ. A reduction in the number of teeth and the number of teeth in occlusion, have an influence on the occurrence.

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Electromiograph Parameters in Thedysfunctional Patient with Open Bite

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INTRODUCTION: Open bite is an occlusal problem that appears in 0.5% of the population, and is more frequent in women.

There is correlation between open bite and dysfunctional syndrome with TMJ disorders.

AIM OF THE STUDY: We attempted to analyze muscular parameters in patients with open bite treated with an occlusal splint by EMG recordings.

MATERIAL AND METHODS: Myotronics K6 electromiograph can provide information in the following situations: maximum force bite, lateral and protrusion movements, with and without an occlusal splint.

RESULTS: In maximum force bite with the occlusal splint more activity was found in the elevator muscles with a lack of dygastric activity.

There was less EMG activity in protrusive and lateral movements with occlusal splint.

CONCLUSION: With better support between the dental arches (occlusal splint) more activity was obtained in the elevators when biting, and when interferences were eliminated activity in the contralateral muscles was reduced.

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Influence of the Type of Occlusion on the Occurrence of Noncarious Cervical Lesion

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INTRODUCTION: The term 'noncarious cervical lesions' (NCCL) stands to indicate the loss of hard tissue