ative force along the dental arch were also recorded. In this way premature traumatic contacts were determined. There were also evaluated areas of support for the particular teeth or groups of the teeth in the maximum intercuspal position (MIP). The center of occlusal forces (COF) in MIP were then recorded. Finally percentage distribution of the values of the resultant occlusal force moments, acting on both sides of the dental arch, were evaluated. As normal differences in these values less than 9 % between bothsides of the dental arch were accepted.

The other groups were defined on the basis of the differences in the values of both sides of the dental arch in the range: 10-19% as a satisfactory group, 20-29% as a moderate group, 30-39% as a high degree group and finally more than 40% as a very high degree group.

The obtained results were submitted for statistical analysis. No correlations were found between occlusal abnormalities and DMA.

56.

Overbite as an Etiological Factor of TMJ Disorders. Clinical and Electromyographic Exploration

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INTRODUCTION: The intermaxillar relationship in overbite is one of the etiological factors of TMJ disorders (Pulinger, Sellingman and Gorbeirn, 1993).

Nevertheless, it does not always cause malfunction. Sometimes the compensating mechanisms of the individual prevent the occurrence of symptoms and it only appears when parafunctional habit overloads the stomatognathic apparatus.

OBJECTIVE: The aim of this study was to escamine neuromuscular behaviour in patients with such occlusal alteration.

MATERIAL AND METHODS: We present two cases with overbite: one bruxist with malfunction and one nonbruxist without symptoms of malfunction.

An occlusal analysis and clinical, kinesiographic and electromyographic exploration was performed in both patients. For the analysis we used a Dentatus A.R.L. articulator, Myotronics electromyograph and K6 kinesiograph.

RESULTS AND CONCLUSIONS: The results of the exploration were compared with those of a healthy individual with normal occlusion, used as a reference.

Lateral movements were restricted and with a mainly vertical component.

In both cases there was an increase in electromyographic activity during normal mastication and swallowing, and in maximum force bite there was the same response between anterior temporalis and masseter muscles.

The study demonstrated that the mandibular movements in both patients were very similar, and determined by the occlusal factor, in comparison to normal individuals.

Nevertheless, the electromyographic exploration shows a different neuromuscular response by the patient adapted to this occlusal problem and the dysfunctional patient.

57.

Influence of Occlusal Interference on the Prevalence of Temporomandibular Disorders

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The significance of occlusal interference in the etiology of temporomandibular disorders has been questioned in numerous recent articles. The aim of this study was to determine the prevalence of the clinical signs and symptoms of temporomandibular disorders in a young male nonpatient population and to investigate a possible association between the signs and symptoms of temporomandibular disorders and occlusal interference. A questionnaire including data from history and clinical functional examination was used in the study. All subjects (a total of 230) were male (army recruits), of 19 to 28 years of age (mean 21.3). Temporomandibular joint clicking was reported in 91 subjects, temporomandibular joint pain on palpation and functional loading in 78 subjects, masticatory muscle pain on palpation and functional loading in 58 subjects, tension type headache in 30 subjects, and mandibular deviation on opening and closing movements greater than 2 mm in 43 subjects. The prevalence of occlusal interference in percentage in 230 young adults, 65% had no occlusal interference during examination of the functional state of occlusion, while 14% subjects had centric slide between centric relation and maximum intercuspation, 5% subjects had working side interference and 16% subjects had non-working side interference during lateral and protrusive mandibular movements. Clinical signs and symptoms were correlated with occlusal interference, although their correlation cannot be considered unique or dominant in definition of a temporomandibular disorder population.