

Assessment of the Relationship between Dentoalveolar Parameters with Class II Subdivision Malocclusion

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Abstract:

Background & aim: Class II subdivision malocclusion, characterized by asymmetry of occlusion has long been a challenge for dentists. The etiology basis of the Class II subdivision has not been resolved, even today. Some studies have shown that the unilateral distal positioning of the mandibular first molars was the primary etiologic factor in class II side. Few other studies, however, found that there was a tendency for skeletal asymmetry. The aim of this study was to determine the Relation of dentoalveolar and skeletal measurements with asymmetric occlusion in class II subdivision malocclusion and comparing it with normal occlusion at year of 92-93.

Material & Method: In this case-control study 60 panoramic, belonged to 30 control with normal occlusion & 30 Class II subdivision patients after matching, were selected. 1st, 2nd and 3rd molar and axial angulations and 3rd molar space were assessed. Third molar space was adjusted for the magnification factor. The final data were statistically analyzed by Mann-U-Whitney test on 95% level of confidence

Results: Statistical analysis indicated significant statistical differences between one of these dentoalveolar parameters (differences between axial inclination of first molar in two sides of mandible in case and control group.)

Conclusion: Class II subdivision asymmetric malocclusion is due to dentoalveolar Factors.

Keywords: class II subdivisions, molar angulation, retromolar space, asymmetry, occlusion, panoramic radiography