Abstract  AIM:

To determine the changes in the molar and canine relationships in transition from the primary to the mixed dentition in 98 subjects selected among Turkish children living in the Erzurum city centre.

METHODS:

This study is based on a 3-year follow-up of 98 children (46 girls, 52 boys) between the ages of 4 and 6 years at the start of the study. The survey focused on the investigation of the changes that appeared in the occlusal relationships in the primary dentition and in the transition to the mixed dentition according to gender and age.

RESULTS:

The findings indicated that 73.6 % of the 98 cases evaluated in the primary dentition developed a Class I molar relationship, and 26.4 % developed a Class II molar relationship. As 64.3 % FTP, 22.4 % DS, and 13.3 % MS molar occlusal relationships were evaluated at baseline; 22.4 % FTP, 11.2 % DS, and 66.3 % MS molar occlusal relationships were evaluated at the end of the third year. While 75.5 % Class I, 11.2 % Class II, and 13.3 % Class III primary canine occlusal relationships were evaluated at baseline; 53.1 % Class I, 5.1 % Class II, and 41.8 % Class III primary canine occlusal relationships were evaluated at the end of the third year. With increased age, a statistically significant difference (p < 0.001) was found in flush terminal plane, mesial step, and primary canine occlusal relationships and no statistically significant difference (p > 0.05) was found in distal step relationships.

CONCLUSION:

Malocclusions observed in the primary dentition are signs of malocclusions in the permanent dentition.

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