

ABSTRACT

The effect of premature loss of deciduous molars on the eruption and malocclusion of the permanent premolars were studied in 641 children. The study group included 322 (164 males and 158 females) and the control group included 319 (160 males and 159 females). Percentages of erupted premolar teeth and their crown heights were recorded in both jaws in both sexes in study and control groups at 9, 10, 11 and 12 years of age. Scores for malpositioning and rotation were also recorded in both groups in both sexes.

The results showed higher percentage of erupted teeth in both sexes in the study group at 9, 10 and 11 ^{years} when compared with the control group. The results were highly significant ($P < 0.001$).

A significant increase in the premolar cusp heights at 9, 10 and 11 years and a significant increase in the malocclusion scores at 9, 10, 11 and 12 years in both sexes in the study group were also observed.

This study establishes that children who lose their deciduous teeth prematurely are more likely to have their permanent teeth early and also a higher percentage of malpositioning and rotation of teeth. A higher percentage of malocclusion will entail higher costs in the maintenance and care of the permanent dentition. Therefore, preservation of the deciduous dentition needs emphasis in Sri Lanka.