

The correlation between occlusal characteristics and temporomandibular dysfunction in Saudi Arabian children..

The aim of the present study was to investigate the association between the different occlusal characteristics and signs and symptoms of temporomandibular dysfunction (TMD) in children with primary dentition in the western region of Saudi Arabia. A total of group of 502 children 4-6 years old residing in the city of Jeddah, Saudi Arabia provided the data for analysis. The result of this study showed significant correlation between signs and symptoms of TMD and some of the occlusal characteristics including posterior crossbite ($P < 0.05$), edge to edge ($P < 0.013$), anterior openbite ($P < .036$) and class III canine relationship and as well as asymmetrical canine relationship ($P < .048$ and $P < .046$ respectively). On the other hand, no correlation was reported between signs and symptoms of TMD and the remaining occlusal characteristics. The lack of significant correlation between TMD and some of the occlusal variants could be attributed to sampling and methodology differences. However, the present study supported the previous conclusion that temporomandibular dysfunction is multifactorial and highlights the importance of early intervention to prevent further consequences to the TMD and permanent occlusion.