



First Maxillary Molar Position Alteration in Class II Division 1 Malocclusion Treatment with Maxillary Premolar Extraction

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Abstract

Treatment of Class II division 1 malocclusion mostly required two maxillary first premolars in order to provide spaces for maxillary anterior teeth retraction. Anterior teeth retraction may cause loss of anchorage. This study aimed at evaluating the effects of anterior teeth retraction towards first maxillary molar loss of anchorage. It was conducted by observing any mesial drifting of first maxillary molar occurred in patients with Class II division 1 malocclusion undergoing treatment with two first maxillary premolar extractions. Material consists of 25 cephalometric films of patients prior to and after orthodontic treatment using Edgewise technique. Cephalometric measurement conducted included S vertical-M1 and FHP-M1. Statistic test used was pairing T-test, showing that $p < 0.05$ for paired data showed non-significant alteration in S vertical-M1 and FHP-M1 measurement prior to and after treatment. It can be concluded that mesial drifting of maxillary first molars did not occur in orthodontic treatment for Class II division 1.

Subject Areas

Dentistry

Keywords

Anchorage Loss, Mesial Drift, Anterior Retraction, Class II Division 1 Malocclusion

1. Introduction

Etiology of Class II division 1 malocclusion was classified into dental and skeletal abnormalities characterized by Class II molar relationship, first maxillary molar contact