ABSTRACT

BACKGROUND:

The demand for fast treatment led to evolution of accelerated orthodontics. Periodontally Accelerated Osteogenic Orthodontics (PAOO) promises to speed up orthodontic tooth movement. Passive self ligating brackets have been proved to have efficiency in alignment and leveling phase. This study has combined two philosophies that is Self ligation bracket system and PAOO. PAOO is a combination of selective alveolar decortication, bone grafting and application of orthodontic forces.

AIM:

The aim of this prospective study is to find any synergistic effect of self ligation brackets in PAOO with respect to treatment duration of alignment and leveling of mandibular arch with crowding.

OBJECTIVES:

The objectives were to assess and compare the treatment duration and dental effects including inclination, angulation and root resorption in alignment and leveling of mandibular arch with self ligation MBT (Mc Laughlin, Bennett and Trevisi) bracket system and conventional elastomeric MBT bracket system in PAOO.

MATERIALS AND METHODS:

16 subjects with 8 in each group with Angles class 1 malocclusion who underwent extraction of first premolar for correction of crowding based on inclusion and exclusion criteria were treated with PAOO.
RESULTS AND CONCLUSION:

No statistically significant differences were found in the duration of alignment and leveling, inclination and angulation and root resorption in mandibular arch in PAOO between both groups. There is no synergistic effect in self ligation group in alignment and leveling phase with PAOO with respect to treatment duration.

KEYWORDS: PAOO, self ligation MBT bracket group, conventional MBT bracket group, alignment and leveling