

Preventive of white spot formation around orthodontic brackets

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Enamel demineralization is a significant problem and can cause major clinical complications of orthodontic treatment with fixed appliances. Prevalence of white spot lesions after orthodontics treatment reported to varying from one-third up to 96 per cent in patients undergoing fixed appliance therapy. The placement of fixed orthodontic appliances creates a favorable environment for the accumulation of microorganisms, which causes enamel demineralization or exacerbates the effects of any pre-existing caries.

Methods: A total of 569 brackets bonded in 30 patients with the Self etching primer (SEP) (Transbond Plus) and randomly divided into two groups: Group 1: 284 brackets (15 patients) (Control group). Group 2: 285 brackets bonded by SEP for 10s at the same time of amorphous calcium phosphate application and after 3 months repeated each month till the sixth month. This clinical trials have used the split-mouth design. The observation period was 6 months. SOPROLIFE -Light induce Fluorescence used to evaluate enamel around bracket.

Results: Statistically significant differences observed between the two groups ($P < 0.05$) and teeth which had treated with amorphous calcium phosphate revealed reducing percent of white spot comparing to control group

Conclusions: The monthly application amorphous calcium phosphate (GC Tooth Mousse), is effective on prevention of demineralization around orthodontic brackets during orthodontic treatment with fixed appliance.

Biography

Mahmoud Alsuleiman has completed his PhD in Orthodontics from The Council of All-Union Scientific-and Industrial Association "Stomatology" – Advanced Faculty of Stomatology (Moscow, Russia), 1991. He Was a Head of the Orthodontic Department at University of Aleppo, 1993-2005, 2011-2012 and Vice Dean for the Scientific Affairs at the Dental School, University of Aleppo, 1997-1999. Now working consultant of Orthodontics at Planet Dental Clinics, Jeddah – Saudi Arabia. . He has published more than 22 papers in reputed journals and supervised 12 Master dissertations and 2 PhD dissertations.

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