Quantitative evaluation on the ability of dental plaque adherence to commonly used provisional crowns

Satheesh B Haralur* Naif S. Gana† Omir S. Aldowah‡ Abdullah Al-Hytham€

*MDS, Assistant Professor, Department of Prosthodontics, †BDS, Department of Periodontics, ‡BDS, Department of Prosthodontics, €M.Sc, Department of Prosthodontics, Najran University, Kingdom of Saudi Arabia. Email: hb_satheesh@yahoo.com

Abstract
Purpose: To evaluate plaque formation on commonly used provisional crowns.
Method: Ten patients undergoing the full veneer crown for lower molar selected for the study. Three different provisional crowns were made from stainless steel, Bis acryl composite, poly methyl methacrylate resin. They were cemented randomly for 24 hour interval. Sterile wooden tooth prick was used to collect the plaque. Micro weighing machine was utilized to evaluate the amount of plaque accumulated. The Data collected was subjected for ANOVA statistical analysis to find the significance among the group and multiple analyses
Results: Chemical composition, surface characteristic plays an important role in plaque accumulation. Stainless crowns had least amount (0.0005 gm) of plaque accumulated, followed by Bis acryl composite (0.0016 gm) and poly methyl methacrylate (0.0025gm) provisional crowns.
Conclusion: Stainless steel crowns were best provisional crown from hygienic point whenever the clinical situation demands long term provisional’s. Alternatively Bis Acryl composite provisional crowns can be used in esthetic region.
Key words: Plaque, Provisional crowns, Crown and bridge.

Introduction:
Interim provisional restoration plays a very important, vital role in crown and bridge restoration during the time interval between tooth preparation and final restoration. Apart from