The Inter-reaction of poly carboxylate Cements with different adhesive via PH and Titration measurements

Rabab Mohamed ibrahim*, B,Ch.D M.Sc., Ph D.(cairo) Adel Mohey el-Din El-khodery**B,Ch.D H.D.D., Ph.D. (cairo)

Abract:

This investigation was Planned to study, by PH measurements and titration method quantitively, the inter action of free acid group present in each mix of different types of poly carboxylate cements with enamel, dentin, Copper, chromium Oxide and nickel.

Results: it was found that, the highest PH value in case PCA cement and highest reachivity when compared with Durelon and carboxylon cements.

As regard the reactivity of the adherened used, the highest reactivity in case of enamel followed by dentin, Copper, chromium oxide and the least with nickel. It was concluded that:

- (1) Titration method is a usefull and easy method to study the adhesive adherened inter reaction.
- (2) The reactivity of poly Carboxylate Cements depend on the amount of free Carboxylic acid groups in the freshly mixed cement.

[•] Lecturer, Crown and Bridge Dept. Faculty of Oral and Dental Medicine,

^{••} Associate Professor, Department of Bio-dental Materials, Faculty of Orat and Dental Medicine, Cairo University.