

## A GUIDE FOR SELECTION OF THE STUD ATTACHMENT TO BE USED WITH TOOTH SUPPORTED OVERDENTURES

Ashraf A. Amer\* and Amal H. Moubarak\*\*

### ABSTRACT

Selection of a stud attachment to be retained within a short 1-001 is a challenge. This study was conducted to help in the selection of the type of attachment to be used with different post lengths. Three post lengths (5, 7, and 9 mm) were tested against four tensile forces (5, 10, 15 and 20 New- .tons) through cyclic loading using an Instron universal testing machine. 1000 cycles was translated to one year of clinical use with maximum of 80000 cycles. At 20 N, 5mm post length failed after 1940 cycles which represents nearly 2 years of clinical use. While at 15 N- it failed after 4100 cy-cles, which represents about four. years of clinical use. With 10 N and 1.5 N the 5mm post length didn't fail till 8000 cycle was completed. 7 mm and 9 mm post lengths didn't fail under the effect of any load till the 8000 cycles were completed.

\* Lecturer, Prosthodontic department, Faculty of Oral and Dental Medicine, Cairo University.

\*\* Lecturer, Prosthodontic department, Faculty of Dentistry, Ain Shams University