

# **Evaluating Dimension accuracy of three differently fabricated denture base materials**

**Ahmed Mohamed El-Sayed<sup>1</sup>, Amr Salah El Din<sup>2</sup>, Inass Abdel Rahman AbuElmagd<sup>3</sup>**

**Objective:** to compare the accuracy of three different denture base materials used in maxillary edentulous arch

**Materials and Methods:** ten patients were selected, with completely edentulous arches, for each patient three final PMMA denture bases were done using different construction technique pack and press, computer aided design/ computer aided manufacturing CAD/CAM milled and selective laser sintering (SLS) PMMA denture base All denture bases in this study were submitted for CBCT scanning for dimension accuracy and volume linear evaluation.

**Results:** The mean and standard deviation values were calculated for each group in each test. Data were explored for normality using Kolmogorov-Smirnov and Shapiro-Wilk tests, data showed parametric (normal) distribution. A statistically significant difference was found between (Heat cure acrylic denture), (CAD/CAM denture) and (Laser sintering denture)

**Conclusion:** also press and pack technique is more time consuming regarding number of visits but less dimensional changes than CAD/CAM and (SLS) selective laser sintering.

**Key words:** denture base, dimension accuracy, CAD/CAM, SLS& dimension accuracy

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<sup>1</sup> Associate professor of Removable Prosthodontics, Faculty of Dentistry, Cairo University.

<sup>2</sup> Lecturer of Removable Prosthodontics, Faculty of Dentistry, Fayoum University.

<sup>3</sup> Associate professor of of Oral Radiology, Faculty of Dentistry, Fayoum University.