



▼ POST GRADUATES ABSTRACTS

PG - 76 : A COMPARATIVE EVALUATION OF ACCURACY BETWEEN VINYL POLYETHER SILICONE AND ADDITION SILICONE USING MONOPHASE IMPRESSION TECHNIQUE IN FIXED PARTIAL DENTURE - A RANDOMIZED CONTROLLED TRIAL

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Background: Elastomeric impression is used for making final impression in fixed partial denture and for various purposes in Prosthodontics. Accuracy of VPES and Addition Silicone might alter on delayed pouring when it is involved in saliva, blood etc., However, literature lacks in prospective randomised controlled trials in this topic to define the accuracy of both materials using monophasic impression technique.

Methodology: In this parallel group randomised controlled trial 64 impressions were made in partially edentulous patients were assigned randomly to groups 1 and 2 through simple randomization. After making final impressions, presence/absence of tear and voids was evaluated using magnification loupes (3x). 128 casts obtained were evaluated using Vernier Caliper (linear dimensional accuracy) and also using stereomicroscope (Axio vision rel.48 software) in dies of distal abutment (accuracy of dies). Evaluation was done by two different

independent (blinded) observers who knew to operate the instrument. Values were tabulated and statistical analysis was done using unpaired t- test using SPSS20 Software.

Results: Accuracy of dies showed statistically significant ($p=0.001$). Linear dimensional accuracy was statistically not significant. Tear and Voids - VPES showed absence of tear in 100% than Addition Silicone which shows 15.6%. VPES showed presence of voids is 6.3% which is minimal when compared to Addition Silicone which showed 9.4% and it showed slight difference between the groups.

Conclusion: Overall accuracy is maintained between VPES and Addition Silicone even after storage for 7days using monophasic impression technique, so both materials are clinically acceptable for making final impression in FPD.