THE EVALUATION OF DIFFERENT ORAL SCANNERS BY MEASURING THE POST CAVITY

Abstract

Objective:

The scanning depth of different intra oral scanners were evaluated in measuring different post cavity depths.

Material and method:

5 typodont maxillar first premolar teeth were prepared to following post cavity depths, 2 mm, 4 mm and 6 mm. For each depth, 2 different intra oral scanner were performed per 15 times. The groups are as follows: Group 1: 2 mm depth scanned by omnicam (OM2), Group 2: 2 mm depth scanned by trishape trios 4 (TR2), Group3: 4 mm depth scanned by ommicam (OM4), Group 4 : 4mm depth scanned by trishape trıos 4 (TR4), Group 5: 6mm depth scanned by ommican (OM6) , Group 6 : 6mm depth scanned by trishape trıos4 (TR6). Afterwards, captions of scanned areas were measured by using Microsoft paint programme. All data were analyzed statistically.

Result: Depth of post cavity ere compared between groups for each depth. The values of TR2 group were significantly higher than values of OM2.The values of TR4 group were significantly higher than values of OM4.The values of TR6 group were significantly higher than values of OM6. ($p<0.05$)

Conclusion: In the study, it is demonstrated that different intra oral scanners were performed different measurement. On the other hand, acrylic resin teeth can show various scanning properties. Further studies are needed by studying extracted teeth and scanned by more oral scanners.

KEY WORDS: post cavity, post core, oral scanners, scanning depth, digital dentistry,