

Accuracy and Reliability of Intraoral Scanners: Are They the Better Option?

Shereen Nossair, Kamal Ebeid, Tarek Salah

Abstract

Purpose of Review

The aim was to compare the accuracy of digital intraoral impressions with conventional impressions on the fabrication of different types of restorations. This study also compared the accuracy, reliability, and ease of use of different types of intraoral scanners available and correlated the results with the different scanning technologies.

Recent Findings

Digital impressions offer the same level of accuracy as conventional impressions regarding fabrication of crowns, fixed dental prostheses (FDPs), implant-supported crowns, and short-span FDPs with marginal gap values within the clinically acceptable range ($<120\text{ }\mu\text{m}$). However, for full-arch restorations, conventional impressions result in better accuracy.

Summary

Further enhancements need to be undertaken regarding intraoral scanners to improve its accuracy regarding fabrication of full-arch restorations. Further in vivo studies evaluating the accuracy of intraoral digital impressions on the fabrication of a wider range of restorations such as inlays, veneers, and full-arch restoration need to be conducted.

Current Oral Health Reports 2017, September