## **EDITORIAL**

## **Digital impression – The future of prosthodontics.**

The success of a prosthesis largely depends on the accuracy of the impression. It is now becoming an alternative to conventional methods of recording impressions. Not only they are more accurate but comes with a lot of added advantages, like increased patient acceptance by removing long chairside impression methods and gag reflex. They have reduced the transportation time, as now a dentist can share digital files with his dental technicians remotely. Since patients can see the intraoral digital imprint, they can be educated about their clinical condition and thus explaining the treatment plan.

A marginal discrepancy up to 120 microns is considered clinically acceptable.<sup>[1]</sup> Single crowns fabricated using digital impression systems are found to be superior in both trueness and precision than those made from traditional procedures.<sup>[2]</sup> The reported marginal gaps way below 120 microns. But results were questionable when impressions of full arches were recorded. A lot of studies reveal that the accuracy of traditional impression methods surpasses the digital counterpart when a full complete-arch imprint is made.<sup>[3,4]</sup> Taking about the limitations is the initial cost of installing followed by the learning curve for dentists to become proficient in using the new technology. Some studies even claim to show equal accuracy for both conventional and digital impression techniques.

Digital impressions have certainly changed the way the dental profession used to be. The future of prosthodontics is cruising towards artificial intelligence and digital technologies; thus, dentists need to embrace it.<sup>[5]</sup> At the same time the classical techniques must also be kept in mind as they lay the foundation of our future endeavours. Digital dentistry is undoubtedly shaping the future of dentistry making it easier and more accessible and for everyone.

ENGAL STATE

## **Reference:**

- 1. McLean J.W., von Fraunhofer J.A. The Estimation of Cement Film Thickness by an in Vivo Technique. *Br. Dent. J.* 1971;131:107–111. doi: 10.1038/sj.bdj.4802708.
- 2. In vivo precision of conventional and digital methods of obtaining complete-arch dental impressions. Ender A, Attin T, Mehl A. *J Prosthet Dent.* 2016;115:313–320

- 3. In-vitro evaluation of the accuracy of conventional and digital methods of obtaining full-arch dental impressions. Ender A, Mehl A. *Quintessence Int.* 2015;46:9–17.
- 4. The influence of digital fabrication options on the accuracy of dental implant-based single units and complete-arch frameworks. Abdel-Azim T, Zandinejad A, Elathamna E, Lin W, Morton D. *Int J Oral Maxillofac Implants*. 2014; 29: 1281–1288.
- 5. Influence of new technology in dental care: a public health perspective. Gracco A, De Stefani A, Bruno G. *Int J Environ Res Public Health*. 2023;20:5364.



## Dr. Arka Swarnakar

Editor-in-Chief Journal of Orofacial Rehabilitation Indian Prosthodontic Society West Bengal State Branch

Reader

Dept. of Prosthodontics & Crown and Bridge Kothiwal Dental College and Research Centre, Moradabad

STBENGA

