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Implants: Making RPDs Great Again!

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Figure 1: Existing prostheses.



Figure 2: Pre-op frontal view.



Figure 3: #31 surveyed crown with positioned LOCATOR® impression copings.



Figure 4: Trial RPD framework assessment.

Case Description and References

The following patient treatment presentation depicts a 59-year-old female who suffered complete loss of her maxillary dentition and partial loss of her mandibular dentition due to periodontal disease. A financial obstacle led to creative treatment planning to achieve a superior removable prosthesis in the mandible. Strategically planned dental implants were placed in the anterior modification space to retain a removable partial overdenture with the use of LOCATOR® attachments and to eliminate the visibility of clasps in the esthetic zone.

Although the treatment may seem routine, several obstacles had to be overcome including malpositioned implants (too close to the adjacent teeth and too far facial), occlusal plane discrepancies, and laboratory communication.

The malpositioned implants resulted in there not being enough restorative space to successfully process denture teeth in the anterior modification space. To solve this problem, custom composite teeth were fabricated to produce an acceptable esthetic result. The denture teeth were set to an ideal plane, a surveyed crown on #31 and composite veneer on #21 were completed to correct the occlusal plane discrepancy. For successful fabrication of the surveyed crown and RPD framework, inspection and modification of the wax ups were completed in person and through digital photography.

The extra steps taken in the fabrication of these high quality removable prostheses ended with a beautiful esthetic result and most importantly a happy patient!



Figure 5: Artificial tooth arrangement and customized wax up #23-26.

- 1) Chikunov, I., Doan, P., & Vahidi, F. (2007). Implant-Retained Partial Overdenture with Resilient Attachments. *Journal of Prosthodontics*, 17(2), 141-148. doi:10.1111/j.1532-849x.2007.00261.x
- 2) De Freitas, R., Dias, K. D., Carreiro, A. D., Barbosa, G. A., & Ferreira, M. A. (2012). Mandibular implant-supported removable partial denture with distal extension: A systematic review. *Journal of Oral Rehabilitation*, 39(10), 791-798. doi:10.1111/j.1365-2842.2012.02326.x
- 3) Grossmann, Y., Nissan, J., & Levin, L. (2009). Clinical Effectiveness of Implant-Supported Removable Partial Dentures—A Review of the Literature and Retrospective Case Evaluation. *Journal of Oral and Maxillofacial*

- 4) Mijiritsky, E., Lorean, A., Mazor, Z., & Levin, L. (2013). Implant Tooth-Supported Removable Partial Denture with at Least 15-Year Long-Term Follow-Up. *Clinical Implant Dentistry and Related Research*, 17(5), 917-922. doi:10.1111/cid.12190
- 5) Mitrani, R., Brudvik, J., & Phillips, K. (2003). Posterior implants for distal extension removable prostheses: A retrospective study. *Int J Periodontics Restorative Dent.*, 23(4), 353-359.



Figure 6: Opaqued retentive element.



Figure 7: Construction of custom composite artificial teeth.



Figure 8: Final mandibular prosthesis.



Figure 9: Frontal view of delivered removable prostheses.



Figure 10: Smile Made Great Again!