



Fig 14.

Fig 14. Refinement of provisional with flowable composite.

Fig 15. Final result.



Fig 15.

This modified trimmed and polished provisional was replaced back into the mouth, and all three PVS segments were repositioned in the mouth to again check that there were no interferences. The other posterior side was then fabricated in the same manner as the first. The third and last PVS segment, which in this case was the anterior natural tooth section, was again tried in with the now two finished posterior segments in place over their respective provisionals to ensure there were no interferences but also to provide accurate indexing to achieve the proper pitch and yaw of the anterior segment. The adjacent surfaces of these two already modified provisionals were lubricated because it is desirable to maintain individuality of the three segments and not fuse them together. The third and last PVS segment, which was now positioned, was removed and allowed to harden out of the mouth before it had the opportunity to fully set and lock into place; this enables the operator to refine the margins and finish the anterior provisional out of the mouth and avoid having the acrylic lock into undercuts. This segmented approach also circumvents any possibility of a nonparallel withdraw between the natural teeth and adjacent implant segments as discussed earlier.

After the three sections were refined to the patient's liking, the posterior sections were torqued to 15 Ncm. The access chambers were filled with PTFE tape to within 2 mm of the occlusal surface, and a stiff elastomeric material was placed in the remaining access chamber space.

Final Prosthesis

One week later the patient returned to the office after having an opportunity to test the new design for phonetic acuity, esthetics, and function. The bite was scrutinized and adjusted to allow accurate bite recordings. The temporomandibular joint (TMJ) apparatus might have been inflamed during the previous lengthy visit. Therefore, a follow-up appointment would give the elevator muscles and suspensory ligaments/muscles in the TMJ complex a greater opportunity to return to physiological health. This may permit the condyle/disc assembly to resume the most physiologically healthy position possible and allow equilibration of the occlusion to be more effective and remain more stable. The TMJ record along with other records, such as esthetic contouring, final provisional models, shades, and photographs, were documented and sent to the laboratory.

The patient returned for the try-in and insertion of the final prosthesis. Teeth Nos. 1 through 5 and 12 through 16 had titanium/zirconium abutments with zirconium crowns cut back with compatible coefficient thermal expansion veneering porcelain. Teeth Nos. 6 through 11 comprised pressed lithium-disilicate crowns cut back with compatible veneering porcelain.²² The patient was pleased both with the final results (Figure 15) and that she was able to contribute to the final design of her smile. The restorative clinician felt that being able to both transfer the approved wax-up accurately to the mouth for the redesign and avoid the need to re-establish the transmucosal anatomy of the provisional was a significant benefit.

Conclusion

This report of a case involving a provisional restoration redesign described a method of preparing an existing provisional's coronal aspect without disturbing the previously developed transmucosal anatomy. The technique can be of significant value if the soft tissue has already been approved by the practitioner. The redesigning of the coronal aspect of a pre-existing provisional illustrated an effective approach to maintaining the transfer from an approved wax-up to a trial smile to the actual prosthesis.

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