Easy and Accurate Provisional Restorations

Steven Miller provides practical tips to ensure success with provisional restorations

Provisional restorations play a far more important role than just a transitional role while the laboratory fabricates the definitive restoration. Of course they function to protect the dentin and pulp from thermal, chemical, mechanical, and bacterial damage, but there is much more.

They are adjusted for ideal aesthetics, phonetics and function. Provisional restorations provide the dentist, patient, and dental laboratory with “in vivo” information, as the patient tests drives the restoration. Especially when changing aesthetics and function, feedback is obtained regarding contour, shape, incisal edge position, over-all aesthetics and function. When dealing with periodontal procedures, such as grafting, crown lengthening and implants, they serve as a great healing evaluation tool. Accurate records including photographs and mounted models of patient approved temporaries provide the laboratory with a functional prescription for the definitive restorations.

Whether the treatment plan is a few single restorations or a full mouth rehabilitation, the first step is always a Comprehensive Examination! Provisional restorations play a far more important role than just a transitional role while the laboratory fabricates the definitive restoration.

There are two patient scenarios that I will describe.

Patient one: Stable function, no aesthetic wants and minor restorative needs, such as a quadrant or less

My dental assistant takes a PVS tray, which is evaluated for voids or less.

My dental assistant takes a PVS impression is being taken. This prepared for ideal aesthetics. He will also demonstrate how to best communicate the case showing you how to check the function and aesthetics. Delegates will be able to treatment plan the case according to Dawson principles before Dr. Buckle outlines his approach. On day one Dr. Buckle will place the lower anterior restorations, Delegates will be able to treatment plan the case according to Dawson principles before Dr. Buckle outlines his approach. On day two you will watch live as he prepares the upper arch, takes all the necessary records and temporises the case showing you how to check the function and aesthetics. He will also demonstrate how to best communicate with the lab to provide predictable definitive restorations.

Patient two: Aesthetic and functional issues and has many more challenges

The examination process now includes mounted models with a centric bite and the Dawson photographic series. The accuracy of these records incorporating all teeth, gingival and vestibular areas is of paramount importance. The age old adage of garage-in, garage-out applies, so make sure to do a thorough examination and take accurate records.

The next step is quiet thinking time and utilising the functional-aesthetic analysis checklist. This checklist creates a problem list that includes the biological, structural, functional, and aesthetic components of a smile. It helps create a vision with the end in mind. That vision is then translated into the 3D architectural plan, the wax-up. The wax-up in incorporates the findings from the FE checklist is one of the most important steps for consistent predictable success.

Prior to the appointment, my dental assistants fabricate from the wax-up the Siltek Putty matrix that has been refined with a light bodied PVS, and place it on the articulator to register the opposing arch to guide the matrix accurately. We also make a Mini-Star vacuum formed clear matrix on a solid model of the wax-up. This clear matrix acts as a guide to visualise clearance and also can be used as a provisional matrix.

After the preparations are completed, we utilise either the Bis-acrylic lock-on or the Bis-acrylic remove and contour technique to fabricate the provisional. After the margins and gingival embrasures have been developed, the step provisional adjustment guide developed by Dr. Dawson is utilised in the mouth. Phonetics, incisal length, centric stops, anterior guidance and long centric are all developed.

The patient is re-appointed with in a week for refinement, verification and after approval, records. These records include mounted models of the approved provisional and the Dawson photographic series. Matrices and a custom incisal guide table are fabricated by the lab to communicate all the information. The definitive restorations are then created without guesswork.

This technique provides reliable, predictable and accurate provisional that allow restorative dentistry to be less stressful and fun. Provisional restorations play a far more important role.