



The Diagnostic Wax-Up: A 3-D Communication Tool

The diagnostic wax-up is one of the most under-utilized communication tools that we have at our disposal. The wax-up not only helps the dentist and technician visualize the treatment plan, but also allows the patient to see what can be done to address their concerns. We should also look at using the diagnostic wax-up to help define the long-term treatment goals for patients.

All too often the dentist develops a treatment plan involving the restoration of the maxillary and mandibular posteriors and has the lab fabricate crowns for one arch against the broken-down teeth of the opposing arch. These teeth are then restored in subsequent appointments. This replacement dentistry often exacerbates any occlusal irregularities which may originally have caused the problem.

Facebow-articulated study models give us the opportunity to develop treatment goals that are in harmony with the functional parameters of the patient. The preoperative models provide us with many clues about the current state of the case. When we fabricate anterior restorations in the maxillae, we must recognize that the arrangement of the lower anteriors will have a substantial impact on the maxillary anterior incisal edge. It is important to balance the aesthetic needs of the patient within the functional parameters of their dentition.

The fabrication of the provisional, based on the treatment wax-up, is the crucial step where we allow the patient to “test drive” the treatment plan. This gives the patient the opportunity to have the dentist make any modifications to the provisionals. Once the patient is satisfied with the provisionals, new models are made and these new models are then used to guide the fabrication of the final restoration.

In this age of “instant everything” we must resist the temptation to go directly to a final restoration which we *hope* the patient can adapt to. The inclusion of this provisional tryout phase will dramatically improve the long-term success of cases where significant changes are planned. The diagnostic wax-up brings the treatment plan from the intangible to a full-scale visual model, resulting in an effective communication tool for all of the treatment partners: Patient, Dentist and Technician.

Paul Rotsaert, RDT