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“All Human Desires Are In Some Way Related To Beauty”

A display of pleasing intact dentition is the key element in the creation of an attractive smile. This involve meeting the needs and expectation of the patients. Thus, conservative treatment that are the solution of esthetic problems involving morphologic modification and provide the result that the patient expects should always be first therapeutic option. In this context, diagnostic wax-up are capable of providing an extremely faithful reproduction of natural teeth. This article focuses on the diagnostic wax-up philosophy to obtain predictable esthetics and function.

Keywords: Diagnostic wax-up, Esthetic, Composite.**Introduction**

The term “esthetics” is borrowed from the Greek word “aesthesia”, which means sensation or sensibility. It can be defined as “belonging to the appreciation of the beautiful”. Esthetic dentistry enhances the natural beauty of the mouth and face and that the term is used specifically to imply an improved relationship rather than the superficial one.

The success of aesthetic rehabilitation not only depends upon clinical procedure but having a clear understanding of patient’s expectations seeking dental treatment to obtain a predictable final outcome in a mutually satisfactory manner. Aesthetic & functional outcome

should be visualized prior to the placement of definitive restoration to avoid major disappointments & unnecessary remake. Hence, diagnostic waxing serves as a valuable tool to enhance predictability of the treatment.

A diagnostic wax-up can be defined according to GPT as “a dental diagnostic procedure in which planned restorations are developed in wax on a diagnostic cast to determine optimal clinical and laboratory procedures necessary to achieve the desire esthetic & function.”

It serves as a treatment guide and establish a trilateral communication between patient- dentist and dental technician. Current situation and how a more esthetic solution can be achieved are clearly discussed, all dramatically increasing patient’s acceptance.

Applications

1. Serve as a tool for diagnosis and treatment planning.
2. Illustrates 3-D representation of final case.
3. Assist in selection of proper restoration and determine need for preprosthetic or periodontal surgery, orthodontic and endodontic treatments.
4. Evaluate amount of restorative space available.
5. Serve as radiographic and implant placement guide.
6. Allow careful evaluation of function and anterior guidance.
7. Guide minimal invasive preparations.
8. Helps in fabrications of provisional restorations.
9. Serve as a tool for diagnosis and treatment planning.
10. Illustrates 3-D representation of final case.
11. Assist in selection of proper restoration and determine need for preprosthetic or periodontal surgery, orthodontic and endodontic treatments.
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13. Serve as radiographic and implant placement guide.
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15. Guide minimal invasive preparations.

16. Helps in fabrications of provisional restorations.

Types of diagnostic Mock- ups

Preliminary diagnostic Mock-up

It is a powerful tool to obtain clinical information in a simplified way before diagnostic wax-up. In this technique, composite resin is used freehand intraorally to contour one or more teeth and evaluate the affect on the patient’s appearance. In many cases, the patient may not be able to perceive the clinician’s diagnosis and treatment plan without a visual aid. In those cases, the mock-up would be a critical step in educating the patient without which, treatment would not be performed.

The mock-up procedure is completely reversible and is done without any tooth preparation, without acid etching or bonding to the teeth. (figure 1 & 2)

Secondary diagnostic mock-up

This mock-up is sometimes being referred to as overlay prosthesis, is done after the diagnostic wax-up has been made. It is formed using a silicone matrix made from the diagnostic wax-up. The matrix is filled with autopolymerizing resin, placed over the unaltered natural teeth and removed upon final polymerization. The resin mock-up typically remains on the teeth as it is mechanically retained in undercuts. (figure 3)

Discussion

The diagnostic wax-up is created by modifying the shape of teeth on a patient's diagnostic cast with the application of wax and by reducing the stone as needed. The diagnostic wax-up often reveals additional necessary treatment that was not evident during the clinical exam and is a dynamic visual and functional aid in achieving predictable results. 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 the diagnostic wax-up is created by modifying the shape of teeth on a patient's diagnostic cast with the application of wax and by reducing the stone as needed. The diagnostic wax-up often reveals additional necessary treatment that was not evident during the clinical exam and is a dynamic visual and functional aid in achieving predictable results. 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.

Conclusion

The diagnostic mock-up procedure is a reasonably quick and straightforward procedure that provides instant clinical feedback prior to the beginning of treatment.

The advantages of this technique are that the desired changes can be visualized clinically, tested with the patient's rest position and smile, as well as evaluated phonetically. In addition, the patient is actively involved

in the diagnostic process providing feedback and sharing the responsibility for the final result. The patient will be more likely to accept a result that he or she visualized and co-diagnosed. Obtaining clinical information to guide the diagnostic wax-up is an important concept. This method will enhance the predictability of the treatment, minimize loss of chairtime, and help to obtain patient acceptance from the beginning of treatment.

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Legend Figures



Figure 1



Figure 2



Figure 3