The Benefits of Restoring Canine Rise Disocclusion

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This research paper is based on my personal clinical observation through several years of professional clinical practice of the silent progressive loss of protective guidance disocclusion of more than 50% of my practice patients. If caught in time and restored with the appropriate anatomical direct restorative buildups, this could make the difference in delaying or avoiding further anatomical tooth structure loss, gingival recessions, abfractions, and detrimental parafunctional habits. This can be combined with an enhanced esthetic oral rehabilitation and be a practice builder. It can provide a preliminary initial phase treatment for the patient prior to an indirect/laminate restorative procedure that is more invasive and costly. I personally prefer the direct versus the indirect restorative technique which provides me, the restorer, versus the lab technician, a higher degree of esthetics control. The downside is that more frequent repairs or retreatments may be necessary but, this provides periodic patient reevaluations which are necessary in patients with this type of condition. Patients are also more sold on the direct technique of saving their tooth structure than on the indirect technique of grinding or removing their natural tooth structure.

In my general practice focused on high esthetic rehabilitations, I have become aware of the loss of the patients canine rise protected guidance disocclusion, in most cases bilaterally due to parafunctional habits. It is normal for patients to parafunction but the key is to diagnose to what degree this becomes detrimental to their dental health. In this research presentation, I limit the scope of treatment to patients who are periodontally stable, have a Class I molar occlusion and have no symptomatic temporomandibular disorder conditions and their wear is due to attrition, with wear facets and fractures who previously had cuspids guidance disocclusion. Mostly, patients are between 20 and 50 years of age.

My research study has noted that the treatment of choice is to provide some type of occlusal splint therapy. In patients with no history of temporomandibular joint pain, this is a very highly noncompliant treatment therapy form. The buildup of the natural tooth anatomy with the direct composite technique is not considered. It is my clinical experience, this initial treatment phase is the first choice of treatment and may provide enough protection to the patients occlusion and parafunctional habits that may not require the use of these appliances. Patient reevaluations are needed to determine this need. If the restorative direct buildups are performed with stable centric relation, centric occlusion, bilateral disocclusion and protrusive stability, initial, immediate chipping and fracture, partial or complete of the composite buildups should not occur, this is an indication of an over contoured or overextended restoration and adjustments or repairs are necessary. Besides, this provides a highly esthetic outcome of treatment and an overall more rewarding experience for the patient and the clinician. Furthermore, delaying the patient deterioration of their functional occlusion.

Patients have to be made thoroughly aware of their diagnosed condition caused by their parafunctional habits which are asymptomatic. First, their posterior occlusion should be evaluated and dentally restored to reestablish dental health and natural anatomy and occlusion. As evidenced by
Caranza, “contacts of the posterior teeth in excursions, caused by occlusal wear, can overload these teeth with negative dental, periodontal, muscular and TMJ consequences.” The ideal relationship might be light coupling of the anterior teeth in centric occlusion with immediate separation called disocclusion, of all posterior teeth in all excursions. During lateral excursion, posterior teeth that contact on the same side as the direction of the mandibular movements are described as having a working contact. Posterior teeth that contact on the side opposite the direction of the lateral excursion are described as having nonworking contact. The analysis of working contacts and the function of anterior teeth is critically important. Contacts disruptive to mandibular movements or stressful to individual teeth are called occlusal interferences or discrepancies. This aspect is critical for correct diagnosis and cause multiple dental complications. Inflammation and soft tissue disease disrupts the integrity of the gingival attachment apparatus resulting in less resistance to force from opposing teeth and related to periodontal disease. Resulting effects are attrition, the occlusal wear from functional contacts with opposing teeth which may occur in incisal, occlusal and approximal tooth surfaces. Clinically, enamel wear facets, craze lines and fractures are observed. Normally, these are not sensitive to thermal or tactile stimulus. Abfractions, resulting from occlusal loading of surfaces caused by flexure, are mechanical microfractures of tooth structure loss in the cervical root areas almost always related to gingival recessions, they are painful, collect dental plaque and are unsightly. These, in their early, incipient stages, can become highly sensitive and in most cases is the initial factor of patient awareness of a dental problem. Most general dentists limit their scope of treatment to desensitizing agents and CIV composit restorations, not fully aware of the whole scope of treatment involved and resulting poor patient results. In my clinical practice, if caught in time, incipient root gingival recessions with abfractions if treated with the before mentioned comprehensive anterior restorative rehabilitation treatment, can delay or even stop the destructive occlusal forces serving a highly beneficial patient care practice method. Furthermore, I am starting to reevaluate, in my clinical practice, patients who have had this type of rehabilitation, cases in which sensitivity related conditions have disappeared without desensitizing agent use and gingival recessions have started to creep back to their natural position. The general treatment of these gingival recessions with attachment loss is routinely done by periodontists with gingival graft procedures. Clinically, I have observed related failures because of the unawareness or knowledge of most periodontists of the concomitant related dental detrimental occlusal forces and dentition wear and the non treatment in combination with the general practitioner. Even orthodontist specialists do not see the need for post treatment orthodontic restorative buildups and only provide retainer occlusal splint therapy.

During my clinical self awareness experience, I have routinely asked various general dentists, periodontists and orthodontists of their awareness and benefits provided by the cuspid guidance disocclusion rehabilitation presented in this research. Their impression is that this method of treatment frequently fractures or is worn down easily by the patient and do not consider it as a method of treatment therapy choice. I can personally vouch for this treatment mode as the initial phase of patient treatment. The benefits of restoring canine rise disocclusion has been a practice builder, it has increased and combined my comprehensive esthetic oral rehabilitation cases and overall been highly satisfying to both patient and practitioner!