

Digital Occlusal Treatment of Chronic Muscular TMD Symptomatology



Research has repeatedly shown that occlusal contacts play a definitive causative role in the etiology of the muscular TMD symptoms. This course will describe the prolonged excursive friction/muscle hyperactivation neuroanatomy that is responsible for the development of chronic TMD muscular symptoms. It will also detail some of the studies that validated this computer-guided occlusal treatment method, while illustrating how to perform this successful TMD therapy that does not require the patient to wear a splint, deprogrammer, orthotic, or appliance.

Learning objectives

- Understand the clinical differences between *visual* posterior disclusion and *measurable* immediate posterior disclusion
- Understand how the neurophysiologic etiology of muscular TMD symptoms through the long disclusion time – excursive muscle hyperactivity physiology, creates the ischemic muscle pain commonly observed in TMD patients
- Understand how the T-Scan and BioEMG simultaneously record and illustrate both the excursive friction and the resultant masticatory muscle hyperfunction that causes the ischemia
- Learn how to significantly and permanently lessen excursive muscle hyperactivity and reduce clinical ischemia thru computer-guided occlusal therapy
- Understand how to treat muscular TMD without intraoral orthotics, appliances, mouthguards, and deprogrammers
- Recognize that measured and un-measured occlusal adjustment procedures are NOT the same clinical process for the operator or the patient, and that all TMD therapeutic occlusal adjustment procedures are not “equilibrations”

Digital Occlusal Analysis Implant Applications



It is well documented that occlusal force overload can result in de-osseointegration of dental implants, mechanical failure of implant parts or screws, and fractures of veneered occlusal surface materials. Full arch implant prostheses can be torqued and flexed from aberrant occlusal forces while segmental implant prosthesis often hold up the proper occlusion of their neighboring teeth, because their rigidity makes them absorb too much occlusal force. The digital approach to occlusal analysis offers the clinician significant advantages over other commonly employed occlusal adjustment techniques. By combining a PowerPoint presentation, with actual implant prosthesis recorded occlusal contact digital data, this presentation describes the clinical implant applications of computerized occlusal analysis.

Learning Objectives

- Understand that occlusal force and contact timing simultaneity are not reliably measured with articulating paper marks
- Learn how to employ the digital occlusal analysis with full arch implant prostheses and mixed arches where teeth and implant prostheses reside together
- Illustrate how digital occlusal analysis can be used to force-map and time-sequence occlusal contacts
- Recognize how measured occlusal force corrections on implant prostheses improve longevity, lessen material breakage and optimize patient comfort, post insertion

SUGGESTED FORMAT:
Full- or Half-Day, Hands-on Workshop

SUGGESTED AUDIENCE:
Dentists and Team Members



ROBERT B. KERSTEIN, DMD
— Digital Occlusal Education —