Using Digital Occlusion Analysis During **Prosthodontic** Case Insertion

When used during prosthesis insertion, digital occlusal technology accurately detects problematic occlusal contacts so a Clinician can target, and adjust, regions of excessive force that can become problematic for the patient comfort. Post-insertion occlusal difficulties greatly impact dental office efficiency, as unwanted "extra occlusal adjustment visits" interfere with the clinicians' daily schedule, increase frustration and induce stress between the patient and the clinician when the problems persist despite repeated attempts to resolve them with further occlusal treatment. Using digital occlusion technology at case insertion eliminates very common prostheses insertion occlusal problems, and ensures far less office time is wasted on unwanted "extra occlusal adjustment visits". This presentation will illustrate how digital occlusion can help a clinician to predictably improve all forms of prosthetic case occlusal outcomes.

Learning Objectives:

- Understand that articulating paper marks do not accurately describe occlusal force and contact timing, and that choosing them for adjustment *subjectively*, based upon their size, has been shown in studies to be a highly unreliable method of selecting contacts for treatment
- See how to employ digital occlusal analysis with full mouth reconstruction, and with fixed and removable prosthetic combinations involving complete dentures and implant overdentures, to install an occlusal force profile that is balanced and centered within the middle of the arches
- Illustrate how digital occlusal analysis can be used to force-map and time-sequence occlusal contacts to establish measurable bilateral simultaneous contacts
- Recognize how measured occlusal force corrections made to crown and bridgework, and fixed and removable prosthetic combinations, can optimize patient comfort post-insertion, thereby lessening the number of unwanted occlusal adjustment visits

Digital Occlusal Technology and Controlling the Overload of **Esthetic** Restorations

Today's esthetic restorations are both beautiful and fragile. Protecting them from occlusal force overload is paramount to their long-term survivability, but that is difficult to do when employing traditional occlusal indicators, which have no occlusal force detection capability. By using computerized force and timing data, the clinician can better prolong the life of the fragile esthetic restoration, while greatly improving overall patient occlusal adaptation.

Learning Objectives:

- Understand that brittle adhesive restorations cannot be evaluated occlusally prior to bonding them to place
- Realize that obtaining reliable interocclusal records with un-bonded adhesive restorations increases case errors at insertion, making insertion occlusal adjustments more difficult than in cases where many lab remounts are possible
- Visualize with T-Scan data, the "g*lancing blow*" damaging contact phenomenon. A glancing blow is a fleeting, short duration, high force contact that can readily crack and chip an all-ceramic restoration
- Illustrate how digital occlusal analysis improves porcelain veneer insertion procedures using actual T-Scan data to describe both the adjustment sequences performed and the occlusal force and timing improvements obtained.

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

SUGGESTED AUDIENCE:
Dentists and Team Members

LEVEL 1, continued

ROBERT B. KERSTEIN, DMD
—— Digital Occlusal Education ——