Contemporary Ceramics: 2017

This presentation will cover many of the current "hot topics" in current dental ceramics from minimally invasive veneer restorations, to full coverage monolithic ceramic restorations. The lecture will go into how I design, and plan an esthetic case. It will also clarify the most appropriate clinical situations and restorative requirements of the various ceramic systems from conventional feldspathic glass systems, glass ceramic systems, to solid sintered mono-phase Zirconia based systems, both layered and the used of the newer higher translucent "monolithic" higher CUBIC PHASE zirconia materials. Clinical and esthetic guidelines for using these ceramic systems will be covered. This presentation will focus on specific clinical indications and contraindications for the use of the various ceramic systems, specifically for no-prep, minimal prep, and normal prep veneers, inlay/onlay, "vonlay (combination of veneer and onlay), and crown clinical indications.

- 1. Treatment planning and case set-up
- 2. The materials and clinical indications for use of conservative (minimal or no-preparation) techniques for anterior bonded porcelain restorations.
- 3. Clinical indications for normal and more aggressive porcelain veneer situations where mostly dentin is exposed.
- 4. Clinical indications, materials, and techniques for Inlays, Onlay's, and Vonlay's
- 5. New Glass ceramics: Lithium Disilicates and Zirconia Reinforced Lithium Silicates
- 6. Clinical situations and materials when a crown is indicated.
- 7. Layered Zirconia based ceramics- problem solving porcelain chipping
- 8. Higher "Cubic" Phase Zirconia Monolithic systems.
- 9. Digital impressions, Chair Side Cad-Cam, and the DDT "digital dental team" concept
- 10. State of the art Adhesion, Cements and cementation

This presentation discusses the most effective use of computerized shade taking systems and will present data comparing the efficacy of computerized systems to visual shade taking.

The presentation will cover a broad range of ceramic systems and their application in veneer, inlay, onlay, vonlay and crown. Specifically high strength glass ceramic and solid sintered Zirconia based ceramic systems will be detailed from prep to cementation along with laboratory guidelines to minimize or eliminate the widely discussed porcelain chipping problem. Current cutting edge concepts and issues and research with cements and cementation both adhesive and non-adhesive will be featured.

•