What is GatorZ?

GatorZ® Solid Zirconia is a monolithic solid zirconia restoration with no porcelain overlay. You'll be impressed by the esthetics of GatorZ solid zirconia restorations when prescribed instead of posterior PFM's, metal occlusals and full-cast metal restorations. GatorZ is virtually chip proof, making it the ideal restoration for bruxers, implant restorations and areas with limited occlusal space.

GatorZ Solid Zirconia crowns & bridges are made from the highest quality zirconia powder from Japan. We chemically and physically reprocess the powder to further reduce the zirconia particle sizes. GatorZ milling blanks are then created through a unique patent-pending process. Unlike conventional high-pressure milling blank manufacture, our processing gives GatorZ improved light transmission, which provides a lower, more natural shade value.

Designed and milled using CAD/CAM technology, GatorZ is sintered for 6.5 hours at 1,530 degrees Celsius. The final GatorZ restoration emerges nearly chip proof and is glazed to a smooth surface.

Indications

GatorZ Solid Zirconia is indicated for crowns, bridges, implants, inlays and onlays. It is an esthetic alternative to PFM metal occlusal/lingual or full-cast restorations. The chip proof durability of GatorZ is ideal for bruxers who have broken natural teeth or previous PFM restorations. GatorZ is also ideal when the patient lacks the preparation space for a PFM.

Patient Benefits

- Chip-resistant, as it is made of solid zirconia with no porcelain overlay
- Glazed to a smooth surface to reduce plaque accumulation

Preparation Requirements

- A shoulder preparation is not needed, but a chamfer type margin is helpful. Feather edge preps will work, but are not the most ideal as it relates to strength.
- For occlusal clearance, conservative preparation similar to full-cast gold with at least 0.5 mm of occlusal space is acceptable, but not the most ideal for esthetics and the addition of nice anatomy.

Instructions for Adjusting and Polishing GatorZ Crowns & Bridges

- Adjust GatorZ Solid Zirconia restorations using a fine-grit diamond with light pressure to avoid potential micro fractures. The specially designed Axis Dental GatorZ Adjustment & Polishing Set (LS-7579) may be purchased through your dental dealer or by calling 800-355-5063.

    - A football-shaped bur is most effective for adjusting the occlusal surfaces of posterior teeth and lingual surfaces of anterior teeth.
    - A tapered bur is most effective for adjusting proximal contacts.
    - A round bur is used to adjust a cusp or fossa and for creating endodontic access.

Cementation Recommendations

- A resin-reinforced glass ionomer cement such as RelyX™ Luting Cement (3M ESPE; St. Paul, Minn.) or GC Fuji Plus™ (GC America; Alsip; Ill.)
- For short or over-tapered preparations, use a resin cement such as RelyX™ Unicem (3M ESPE) or Panavia™ F2.0 (Kuraray; New York, N.Y.)

Instructions for Seating GatorZ and Other Zirconia-Based Crowns & Bridges

GatorZ restorations are fabricated from solid zirconia oxide material, much like the zirconia oxide coping found in restorations such as Prismatik Clinical Zirconia™, Lava™ Zirconia (3M ESPE; St. Paul, Minn.), and NobelProcera™ (Nobel Biocare; Yorba Linda, Calif.). Like most metals, zirconia exhibits a strong affinity for phosphate groups, and zirconia oxide is no different. We can take advantage of this fact with phosphate-containing primers, such as Monobond Plus (Ivoclar Vivadent; Amherst, N.Y.) and Z-Prime™ Plus (Bisco; Schaumburg, Ill.), or cements such as Ceramir® Crown & Bridge (Doxa Dental; Newport Beach, Calif.). Unfortunately, saliva also contains phosphates in the form of phospholipids, so when a GatorZ crown or bridge is tried in the patient's mouth and comes in contact with saliva, the phosphate groups in the saliva bind to the zirconia oxide and cannot be rinsed out with water. Attempting to use phosphoric acid (which is full of phosphate groups) to "clean" the saliva out only makes the problem worse.
The only way we have found to successfully remove these phosphate groups from the interior of a GatorZ restoration is with the use of IvoClean (Ivoclar Vivadent). This is a zirconia oxide solution placed inside the restoration for 20 seconds and then rinsed out. Due to the large concentration of free zirconia oxide in the IvoClean, it acts as a sponge and binds to the phosphate groups that were previously bound to the GatorZ restoration. Once the IvoClean is rinsed out, you will have a fresh bonding surface for the Monobond Plus, Z-Prime Plus or Ceramir to bond to.
The protocol would be:

1. Try in GatorZ or zirconia-based restoration.
2. Rinse saliva out of restoration.
3. Place IvoClean in restoration for 20 seconds and rinse.
4. Cement restoration with Ceramir –or– place Monobond Plus/Z-Prime Plus and place with cement of your choice.