Instructions for seating **Brux**Zir[®] and other zirconia-based crown & bridges

BruxZir restorations are fabricated from solid zirconia oxide material, much like the zirconia oxide coping found in restorations such as Prismatik Clinical Zirconia, Lava, and Procera Zirconia. 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 and Z-Prime Plus, or cements such as Ceramir from Doxa. Unfortunately, saliva also contains phosphates in the form of phospholipids, so when a BruxZir 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 BruxZir restoration is with the use of Ivoclean from Ivoclar. This is a zirconia oxide solution placed inside the restoration for 20 seconds and 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 BruxZir 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 BruxZir or zirconia-based restoration.
- 2. Rinse saliva out of restoration.
- Place Ivoclean in restoration for 20 seconds and rinse.
- Cement restoration with Ceramir OR place Z-Prime Plus/ Monobond Plus and place with cement of your choice.

See reverse for adjusting and polishing instructions.

Instructions for adjusting and polishing **Brux**Zir° crown & bridges

- Adjust BruxZir Solid Zirconia restorations using a fine-grit diamond with light pressure to avoid potential microfractures, or purchase the BruxZir Adjustment & Polishing kit.
- A football-shaped bur is most effective for adjusting occlusion on 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.
- Polish BruxZir restorations with the porcelain polishing system of your choice, or purchase the BruxZir Adjustment & Polishing kit.
- Using light pressure and no water, begin pre-polishing with the brown cup. This will remove abrasions left by the diamonds during adjustment. The brown cup can also be used alone for minor adjustments if you don't want to use a diamond.
- Continue pre-polishing with the blue cup until a more glossy look appears over the adjustment areas.
- Finally, use the white cup with light to medium pressure to achieve a "wet" high shine.

Visit www.bruxzir.com for more information.