

11 Uses of ACTIVA for Successful Long-Term Restorations

– By John C Comisi, DDS, MAGD

A family of materials that I have found extremely helpful and easy to integrate into my practice is ACTIVA BioACTIVE. These products offer a unique bioactive chemistry, which releases and recharges fluoride, calcium and phosphate ions.

Dual-cure and easy to handle, these materials share similar chemistries and have a wide range of clinical applications.

ACTIVA BioACTIVE-RESTORATIVE has become the “work horse” in my practice. Here are a few of the ways my colleagues and I are using ACTIVA BioACTIVE.



1. Posterior Restorations

Independent testing shows that wear and durability of ACTIVA BioACTIVE-RESTORATIVE is similar to composites and significantly less than glass ionomers. The fracture resistance of ACTIVA is far superior to traditional composites, RMGIs and GIs.

2. Anterior Restorations

I have used ACTIVA to restore a fractured tooth #10 with excellent results (see figures below).



Fig. 1 Shows fractured tooth #10.



Fig. 2 Shows final esthetic restoration with ACTIVA BioACTIVE-RESTORATIVE.

3. Bulk Fill

ACTIVA's dual cure chemistry ensures depth of cure and reduces the risk of unpolymerized resin (a major cause of sensitivity).

4. Failing Crowns

ACTIVA BioACTIVE-RESTORATIVE is used to repair failed crown margins. The bendable cannula can be positioned under crown margins, and ACTIVA is injected into the area.



Fig. 1 Caries under crown margin has been removed. 10-second etch and removal of all excess moisture not shown.



Fig. 2 Moisture-friendly ACTIVA bonds to tooth, metal and ceramics, and mimics the function of missing tooth structure.

5. Strip Crowns

ACTIVA's easy handling, flowability and dual cure properties make it perfect for strip crowns, a fast and economical solution for children and cost-conscious adults.



Fig. 1 Shows rampant caries.



Fig. 2 Decay is removed and teeth prepared for restoration.



Fig. 3 Strip crowns were prepared in advance on a study model.



Fig. 4 Final ACTIVA restoration using the strip crown technique.

6. Base/Liner

Activa Base/Liner is ideal for deep preparations. It provides a reservoir of calcium, phosphate and fluoride ions that seal and protect dentin.

7. Core Build-Ups

Dentists are using ACTIVA BioACTIVE-RESTORATIVE as a core build-up material, with and without posts.

8. Direct Multi-Unit Restorations with Prefabricated Matrix

I have seen many cases successfully completed using a prefabricated matrix and the ACTIVA injection technique. Either a putty matrix or a clear vacuum formed "suck down" can be used for this economical, one-visit, multi-unit restorative solution.



Fig. 1 Pre-op photo.



Fig. 2 Idealized wax-up and refractory putty matrix.



Fig. 3 Shows teeth after caries removal.



Fig. 4 Same day finished case immediately post-op.

9. Pediatric Restorations

ACTIVA KIDS comes in an opaque, milky white shade that matches deciduous teeth and can also be used to mask dark stains.

10. Cementation

This bioactive cement is compatible with all substrates, including zirconia, e.Max, metal and composite. It can be used to cement posts and works well with ACTIVA BioACTIVE-RESTORATIVE core buildups.

11. Class V

ACTIVA BioACTIVE materials are moisture-tolerant and work well in cases where isolation is an issue.