

HOW TO

USE A BASE MATERIAL TO PROTECT, SEAL DENTIN

Using Ca-Lok, a new liner/base for bonded restoratives, for optimal results.

Information provided by The Nash Institute.



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FOR YEARS I HAVE LOOKED FOR THE perfect base material to protect and seal the dentin after preparation and caries removal prior to placing direct or indirect bonded restorations. Recently I have discovered Ca-Lok by TAUB Products (taubdental.com). Ca-Lok is a light-cured calcium filled resin with adhesive properties to dentin and seamless compatibility to other restorative materials.

Ca-Lok is radiopaque and releases fluoride. It is used as a protective liner and can be placed under restorative materials and cements for all deep cavity preparations. The material creates adhesion which is designed to seal out microleakage and eliminate sensitivity.

Case Presentation:

A young male patient presented with proximal decay in all four posterior quadrants. In the pre-operative radiograph shown in Fig. 1, you can see the evidence of caries on the mesial of the first molar and the distal of the second premolar.

The occlusal surfaces of the two teeth to be restored can be seen in Fig. 2.

STEP01 A carbide cutting bur was used to establish the outline form of the preparation (Fig. 3) and a round bur in a slow speed handpiece was used to remove proximal caries (Fig. 4).

STEP02 Final caries removal was accomplished with a small spoon

excavator and it was obvious that the decay came in close proximity to the pulp, especially in the first premolar. The final preparations are shown in Fig. 5.

STEP03 The prepared teeth were thoroughly cleaned and lightly dried. Ca-Lok was applied to the dentin areas near the pulp (Figs. 6 and 7).

STEP04 An LED curing light was used to cure the liner/base for 20 seconds (Fig. 8). Fig. 9 shows the Ca-Lok after light curing.

I noticed that the material flowed easily and I was able to place it precisely. After light curing, I noted that it was very hard and did not dislodge even after checking with an explorer.

STEP05 At this point, I used selective etch, a universal bonding agent to place the restorations. They can be seen prior to rubber dam removal in Fig. 10.

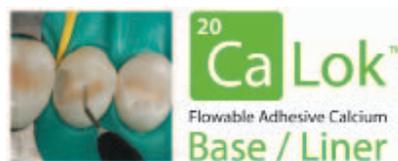
The final restorations are shown in Fig. 11. Fig. 12 shows the radiograph of the finished restorations. The Ca-Lok can be visualized under the composite resin material.

More on Ca-Lok

Recently released by TAUB Products, Ca-Lok is a flowable adhesive calcium-filled resin base/liner that releases fluoride and is radiopaque. Ca-Lok flowable adhesive calcium base/liner is a light-cure, calcium-filled resin designed to adhere to dentin and offer seamless compatibility with other restorative materials. ●

ABOUT THE AUTHOR

Ross W. Nash, DDS, maintains a private practice in Huntersville, N.C. where he focuses on esthetic and cosmetic dental treatment. He is an Accredited Fellow in the American Academy of Cosmetic Dentistry. Dr. Nash lectures internationally on subjects in esthetic dentistry and has authored chapters in two dental textbooks. He is cofounder of the Nash Institute for Dental Learning in Huntersville and is a consultant for numerous dental products manufacturers.



AT A GLANCE

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| 1. Pre-op radiograph | 5. Final preparations | 9. Ca-Lok in place |
| 2. Rubber dam placed | 6. Application of Ca-Lok | 10. Final restorations before rubber dam removal |
| 3. Tooth preparation | 7. Application of Ca-Lok | 11. Final restorations |
| 4. Caries removal | 8. Ca-Lok light cured | 12. Post-op radiograph |

