The article by Dr. Leinfelder and Dr. Kurdziolek discusses the issues surrounding the search for a porcelain substitute, especially in the use of posterior restorations. If you think that this search is driven by the cosmetic contingent, be assured that it is more involved than that.

I had a conversation with Dr. Gordon Christensen in which he expressed his wish for a reliable resin replacement for porcelain in fixed prosthodontics. It seems that if a company can successfully bond their resin system to precious, semiprecious, and nonprecious metals, they may be well compensated by dentists worldwide.

This compensation has already been proven through the high demand for Artglass®-to-metal crowns, which despite a high failure rate, still remain popular. The basic reason for the popularity of Artglass®-to-metal is its cost. Because resin systems take less time and skill to fabricate a full crown compared to traditional porcelain systems, some of the largest laboratories in the country are offering these crowns for as little as $59. In an environment where many dentists feel they are unable to raise their fees because of insurance, dropping the per unit lab bill from $115 to $59 is noticed.

A Common Complaint

One of the most common complaints I hear at my seminars is from dentists who raise their fees, only to get notification from the insurance company that their fees are 5.9% above the usual, customary, and reasonable rates for their area. The insurance company asks the dentist to resubmit a new fee schedule, requesting that they lower the fees of the procedures they perform most often. How can insurance companies tell dentists they are charging too much compared to the dentist across the hall when the insurance company has no idea which labs are being used? If both dentists are forced to charge $600 for a crown, regardless of quality control issues, the quality dentist will stop using the quality lab if he or she cannot raise his or her fees to reflect necessary increases.

A Porcelain Alternative

Clinically, however, there are still many compelling reasons to search for a porcelain alternative. Delegate everything the state practice act allows to the highly trained registered dental assistant. My assistants remove the temporary and try the crown onto the tooth. If a contact is tight, they adjust it and try it back in the mouth. Many dentists are afraid to have their assistants perform this duty because they fear that the assistant may open a contact and the crown may have to be returned to the lab. However, with a resin-fused-to-metal system, the contact could be added chairside in less than a minute. Occlusal contacts can be added if necessary, and even shade changes can be performed chairside because of the composite's working nature.

Because porcelain is a glass, it does not exhibit great tensile strength. A porcelain-fused-to-metal crown with an occlusal interference will either cause the porcelain to break or create unnecessary wear on the opposing tooth. Composite is more flexible than porcelain and can bend without breaking. Because the wear rates of these materials tend to closely match those of the opposing dentition, an eccentric contact will probably not result in a fracture or damage to the opposing tooth.

Whether these resin systems will ever replace porcelain for anterior esthetic purposes entirely is unknown, but currently porcelain is preferred. For everyday posterior uses, however, a resin system like belleGlass™ HP, which can be reliably bonded to metal copings, will be a welcome addition to the restorative armamentarium. ■

Michael C. DiTolla, DDS
Private Practice
Los Alamitos, California
Phone: 714.633.9647
Fax: 526.594.6540
E-mail: docmike222@aol.com

Dr. Michael DiTolla practices in two locations, both of which emphasize esthetic dentistry and orthodontics, an essential component of esthetic dentistry. He is a nationally recognized lecturer on practice management for esthetic practices, and he serves on the editorial board of Contemporary Esthetics and Restorative Practice. *He also lectures regularly for P.A.C.-live, a hands-on esthetic program, which allows dentists to treat live patients.*

Continuing Education Opportunity

Receive 12 hours of continuing education credits aboard the Celebrity Galaxy during an Inside Passage Alaska cruise. The cruise, which runs from June 30 to July 7, 2000, will feature Dr. Ken Koch in "Real World Endo" with hands-on sessions.

Prices for the cruise only start at $1,054. For more information, call Carolyn at (888) 831-SAIL. The cruise is sponsored by Asteto Dent Labs of Maplewood, NJ. For more information about Asteto Dent Labs, call (800) 447-7750.