COMMENTARY

CONSERVATIVE AND ESTHETIC CAST GOLD FIXED PARTIAL DENTURES—INLAY, ONLAY, AND PARTIAL VENEER RETAINERS, CUSTOM COMPOSITE PONTICS, AND STRESS BREAKERS: PARTS I AND II

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Drs. Richard Stevenson and Jane Refela are to be commended for their excellent two-part article describing the use of conservative cast gold fixed partial dentures. In an era of almost unbridled esthetic lunacy, their comments are a breath of fresh air and remind us that, for many patients, the potential life span of a prosthesis is much more important than the esthetic potential. However, I think it is important to point out that the esthetic results of the protheses illustrated in these articles are generally excellent, and perusal of the photographs of the finished restorations will reveal that, with intelligent preparation design, the margins of the gold restorations are basically invisible in most patients. Thus, even though cast gold has been used to fabricate the abutment restorations, the esthetic compromise is negligible.

In part I, the use of $^{3}/_{4}$ and $^{7}/_{8}$ gold crowns as abutment retainers is described and illustrated along with rigid connectors and a gold/composite resin pontic. This option is conservative and esthetic and should provide excellent long-term service. Several cases are illustrated by using a combination of partial veneer and inlay and onlay retainers along with nonrigid connectors. In my opinion, the use of nonrigid connectors is completely appropriate because of the significant difference in retention potential of these retainers. A few years ago, I had the honor of evaluating 1,314 cast gold restorations placed by Dr. Richard V. Tucker of Ferndale, WA, many of which had been in place for over 40 years.[1] Among these restorations were several stress-broken fixed partial dentures with inlay retainers, cemented with a space-age product known as zinc–phosphate cement. All had provided maintenance-free clinical service exceeding 30 years.

Examination of figures 13, 18, and 30 will demonstrate that, with these conservative fixed partial dentures, the display of gold with a normal conversational smile is nonexistent, providing an excellent esthetic result. Using partial veneers and inlay/only retainers conserves a considerable amount of tooth structure compared with the "esthetic" preparations required for metal–ceramic crowns, thus improving the long-term prognosis for the tooth/restoration complex.[2] At the time of writing (2009), all-ceramic fixed partial dentures, especially for replacing posterior teeth, are simply contraindicated.

In part II, the authors describe the use of extremely conservative abutment preparations using pin-retained inlay retainers and illustrate the technique on both typodont teeth and in actual clinical cases. The use of clinical cases is important, as it demonstrates that this is indeed real-world dentistry, and it might also be useful to note that the authors work and practice in Los Angeles, which is well known as the center of esthetic lunacy. Patients tend to make good decisions regarding the choice of their restorative dentistry when they are educated properly by their dentists and understand the advantages and disadvantages of restorative materials.

It is important to note the extensive detail the authors provide regarding the fabrication of such conservative prostheses. A very sophisticated technique for fabrication of an esthetic gold/composite resin hollowed cage pontic is presented by using composite resin, opaquers and tints, and a metal primer. They describe both the vented pin channel technique and the time-tested Shooshan plastic pin technique, popularized many, many years ago by the late Dr. Dave Shooshan. The reader is encouraged to evaluate the beautiful clinical dentistry illustrated in figures 27 to 29 in terms of its conservation of tooth structure and ultimate esthetic result.

It must be appreciated that these are extremely sophisticated techniques that should only be undertaken by clinicians who have honed their knowledge and skills to a high level. Unfortunately, most dental school curricula do not have sufficient time to devote to conservative cast gold procedures. Most schools offer "elective" programs in conservative

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cast gold that allow a small number of students to become proficient, but the majority of students graduate, knowing few of the essential details. Dr. Stevenson, in particular, is to be congratulated for establishing an extremely successful cast gold selective at the University of California, Los Angeles School of Dentistry. In addition, there are over 50 R. V. Tucker study clubs around the world that teach conservative cast gold techniques to their members. Dentists considering improving their education and skills in conservative cast gold should visit the Web site for the Academy of R. V. Tucker Study Clubs at www.rvtucker.org.

In summary, Drs. Stevenson and Refela have made an extremely important contribution to the current scientific dental literature. The techniques and procedures they have described and illustrated are not new but are time tested and are likely new to a majority of readers of this journal. Dentists, particularly younger dentists, are encouraged to read the articles carefully and reconsider the role that cast gold may play in their practices. Cast gold is unquestionably the most durable restorative material available to dentists today. It permits extremely conservative cavity preparations and can be carried out without unsightly display of metal. Most dentists of my generation have their posterior teeth restored with cast gold. If it is good enough for us, surely it is good enough for our patients.

REFERENCES

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