

A Prosthodontic Wake-Up Call: Reaffirming the Complete Denture, Implants Alone Do Not Solve the Problems: The Old Principles are Still Important

AFTER READING Dr. David Felton's article "Do No Harm" in the June 2004 *Journal of Prosthodontics*, I felt that I should add something to his concerns.

For a long time, I have believed the specialty of prosthodontics has lost its way. The emphasis has shifted to certain limited areas; i.e., implants, esthetics, and so-called "cosmetic dentistry." This began when implants appeared in approximately 1986. I am not saying these are not important because they are, but they have become the predominate topics in our journals.

The Glossary of Prosthodontic Terms defines prosthodontics as follows: "The branch of dentistry pertaining to the *restoration and maintenance of oral function, comfort, appearance, and health* of the patient by the restoration of natural teeth and/or the replacement of missing teeth and maxillofacial tissues with artificial substitutes," (my italics). Notice the order of the italicized items. Function is first followed by comfort and appearance. This is as it should be as far as the order of importance.

Dr. Felton's article was really an article about ethics. When these practitioners place appearance before function, comfort, and general oral health of the patient, they are unethical. When they use the excuse "if I don't do it someone else will," they are again unethical. Dr. Felton also wondered why the editors have not required occlusal views in these articles. They may not think it necessary or important; I think it is very important.

There have been many articles recently on implant rehabilitation, and I have never seen so many class I occlusions. How can all these reconstructions be class I? Implant therapy must have the fixtures in bone, bone that often has undergone

considerable resorption. Logic says these fixtures cannot be in the same location as the natural teeth even if the natural teeth were class I. Simple observation shows what I am talking about. Maxillary and mandibular anterior teeth shown in perfect alignment. The anterior maxilla resorbs superiorly and posteriorly; therefore the fixtures must be superior and posterior. The teeth on these fixtures will be superior and posterior to the natural teeth. How do I know these artificial teeth are not where the natural teeth were? The incisive papilla is between the central incisors. In several cases, the papilla was anterior to the centrals. If I remember my anatomy, the incisive papilla is behind the centrals. These teeth are not in their original anterior/posterior or superior positions. Lateral views show posterior teeth perfectly aligned. The maxillary posterior implants must be palatal to the natural tooth position because the maxillary arch resorbs palatally. If bone is palatally resorbed, the fixtures are palatal and so are the teeth. This means the mandibular teeth are lingual to the natural tooth position, unless they are placed in cross bite, which I have not seen. Does this bring to mind reduced tongue space and potential speech problems? This does not fulfill the prosthodontic definition of replacing the missing structures. The structures cannot be where they used to be. I do not think dentists adequately trained in complete dentures would be restoring these patients with fixed prostheses. They know everyone is not class I, especially after bone resorption.

The esthetics in these cosmetic makeovers is often marginal. Apparently these dentists have not studied what it is that makes teeth pleasing in appearance. Natural teeth do not have contact points beginning at the incisal edges that stay in contact with the full length of the teeth up to the necks. The embrasures and smiling line are nonexistent. Snow-white shades do not exist in nature except on primary teeth. The cases

shown are not children. Color is important but not as important as form. White is not necessarily beautiful, form is. Shape, morphology—however you characterize it—will usually take precedence over color. Gazelles are more pleasing than hippos, except from the hippos' viewpoint. Many subtle things must be accomplished to create pleasing replacements for natural teeth. Dr. Fischer and Dr. Frush described these principles 50 years ago in their articles on esthetics. Duplicating nature is desirable but never do anything no one has ever seen before.

The complete denture has always been the orphan of the dental curriculum, apparently deemed of less importance in dental education. The stated reasons are that fewer people will be losing teeth because of advances in periodontics and fluoridation. This may be true, but there are more people now and the number of edentulous people is about the same.

Constructing complete dentures is one of the most difficult procedures a dentist undertakes. It is an abstract three-dimensional visualization—requiring placement of the teeth and missing structures in a complex neuromuscular area called the oral cavity. There are no remaining structures to be relied upon. You must establish lip support, the plane of occlusion, the compensating curve, the division of space, the vertical dimension, record centric relation, determine the mean foundation plane and many other minor but important things. This is a full mouth rehabilitation starting with nothing. If I were responsible for dental education, I would insist on complete denture instruction beginning with the sophomore year and every semester until graduation. Graduate

training would also require this. When students are able to construct dentures with nothing done by a laboratory, they are going to be better dentists because they will have been compelled to become more critical observers of the oral mechanism and how it functions to build the denture. Trained this way, students will observe things in edentulous and partially edentulous mouths that they would not have been as aware of without the denture training. The principles have not been identified or emphasized enough and no one is noticing. The failure to be observant and realizing what is needed in an oral reconstruction has caused the situations Dr. Felton described. Dentists should be acutely aware of this; it seems they are not, nor are the editors. I think that this is what has happened in prosthodontics.

The heads of graduate prosthodontic departments should ask themselves, can my students make dentures without help from a laboratory when they graduate? If they are unable to do this, how can they even begin to plan an edentulous implant reconstruction? This is not a laboratory procedure. If you construct an inadequate denture, you can discard it. If you have implants placed incorrectly you have a problem. You cannot discard the implant fixtures.

To prove my point, I do not think that it is a coincidence that the first course on complete dentures from the Center for Prosthodontic Education as mentioned in a recent ACP Messenger is sold out. Implants alone do not solve all prosthodontic problems, they are just another method of holding teeth in the mouth. The specialty of prosthodontics should go back to teaching more of the basics.

Sincerely,
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