A CONSERVATIVE APPROACH TO ORAL REHABILITATION

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A DICTIONARY DEFINITION of "conservative" reads: "within safe bounds, moderate, adhering to sound principles, believed to involve little risk." The noun "conservatism," is defined as "the disposition and tendency to preserve what is established."[1]

Oral rehabilitation by means of complete occlusal reconstruction is a difficult and arduous task. Dentists have always engaged in this procedure, but until 25 years ago, it was undertaken by a select few. Dentists approached their objective with timidity and diffidence. Now dentists everywhere are completely reconstructing mouths.

Oral reconstruction has its effect both upon the dentist and the patient. It is time consuming, tiresome, and expensive for the patient, and for the dentist it is exhausting and time consuming. Its goal is the preservation of the dental organ as a functional apparatus. This includes mastication, speech, and esthetic appearance. For the treatment to be completely successful, the reconstruction must not merely halt the destructive forces, but it must enable the organ to perpetuate itself without wearing out in spite of function and aging. For partial success, the forces of destruction must be halted so that continued breakdown ceases.

CONFLICTING THEORIES

Many theories have been advanced as to the cause of occlusal breakdown, but dentists still disagree about the actual causes. There are those who believe in the dominance of the condyles over the teeth and those who believe that the teeth are the controlling factor. Some regard incisal guidance as the most important control, while others make the incisal guidance secondary in importance to the posterior cusp inclines and condylar guidance. In some patients the mandible is moved forward; in others it is retruded. Some dentists believe in the registration of hinge axes, and others scoff at the making of an ordinary face-bow record. Some believe that people chew primarily on the horizontal plane, while others maintain that they chew primarily vertically on or close to the midsagittal plane. There are those who believe that a balancing contact is often traumatic and are willing to eliminate it in their finished restorations; others contend that maximum contact in all positions is essential. Some believe that the shape of the cusps should be parabolic, whereas their opponents are quite willing to accept

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flat or even concave cusp surfaces. Some start their mandibular movements from a retruded hinge closure position, and many others will start mandibular movement only from a slightly advanced centric relation position.

THE BENNETT MOVEMENT

One school of thought believes the Bennett movement occurs solely on the horizontal plane, whereas some of their colleagues maintain that it occurs in the sagittal plane. Of course, many of these differences are due to lexicographic variations, but others are more fundamental. Each inventor of an articulator either maintains silence relative to his inventor colleague or asserts that most other machines (except his own) lack the ability to reproduce mandibular movements.

ORAL RECONSTRUCTION AS A SERIOUS UNDERTAKING

When a patient seeks oral repair, be sure complete rehabilitation is needed before engaging in that perilous procedure. If there is a simpler way to proceed, study this simpler method. With the great advances in operative techniques and armamentarium, especially with the high speed machines, extensive prosthetic procedures have become a great temptation to general practitioners. As a result of this widespread practice of complete occlusal reconstruction, there are an increasing number of patients who are unable to adjust to this changed oral environment. Incorrect changes in the occlusal pattern can cause psychologic disturbances which can pose a more serious problem than the original occlusal defect.

In the stages of scientific development, first there is discovery and widespread, indiscriminate use. Then comes painful reappraisal, after which the true value is determined. This is attended with limitations for its use and its dangers. These must be fully understood so that one may be able to discriminate as to how and when to use the particular scientific development. A large number of our colleagues firmly believe that many periodontically involved cases have not been caused by occlusal trauma. Therefore, why not try all other means for eradicating this disease first before launching upon a journey from which, once started, there is no turning back. Hillman[2] and Young,[3] two orthodontists, believed that "the normal occlusion of the teeth conceived by the orthodontist to present 100 percent perfection is a myth. It has no biological justification or scientific foundation."[2] They also believed that "maximum continuous contact of the upper occlusal surfaces in all centric and excentric ranges does not occur in normal natural dentitions, or if it does, it is extremely rare."[3]

PROMISES TO PATIENTS

Let us be careful in the promises we make to our patients relative to wiping out the appearance of age. There is just so much that can be done to check the appearance of aging, and often this is not within our sphere of responsibility.

It is folly to believe that all temporomandibular joint pain and dysfunction are caused entirely by malocclusion. Schwartz[4] states that "the incidence of

organic involvement of the Temporal Mandibular Joint is low, and although its disfunction may be annoying or even painful, it is rarely serious." He seriously questions the belief that occlusal trauma is responsible for the majority of disturbances in the temporomandibular joint.

DENTITIONS IN MALOCCLUSION MAY BE IN EQUILIBRIUM

If a patient is not conscious of his oral organ, if he eats well, has no trouble with hearing, and has a moderately presentable occlusion, and if roentgenograms of the mouth are favorable for his age, be careful before undertaking complete oral reconstruction. A dentition may be in malocclusion, but it still may be in equilibrium, and to change it to our concept of occlusion may do the patient an extreme disservice. The best service that can be rendered to some of these patients is to leave them alone. For example, many patients with a deep vertical overlap are treated best by not changing the occlusion.

TOTAL RECONSTRUCTION VERSUS GOOD CONFORMATIVE DENTISTRY

Some patients cannot be treated simply. In these instances, the occlusion is badly broken down and the teeth have rotated and migrated; teeth are missing, and the patient is a dental cripple. This type of patient is not met as often as the patient who needs good conformative dental reconstruction built up to the type of occlusion he presents and to his present vertical dimension. It may not be possible to build the ideal occlusion, but the dentist can construct compromise restorations with the honest conviction that not only is he doing the patient a great service, but also that he is treading on safer ground. For this type of situation, conformative dentistry will provide for better function, enhance the chances of longevity, provide for lower costs, do the work in less time, and take less energy from both dentist and patient.

SPECIAL TECHNIQUES

We must guard against evaluating occlusal therapy in terms of some rigid mechanical concept. There is no one system that has a priority on perfection. There is no doubt that certain mechanical concepts can produce success for certain patients who have conditions peculiarly favorable for the application of a specific theory. However, to apply any given system to the infinite variety and broad area of our prosthetic problems is not only futile but dangerous. Our best assets are knowledge and personal skill. Progress means a search to make dental treatment easier to perform, while making it more successful and available to more people.

GOOD CONFORMATIVE DENTISTRY

Good conformative dentistry requires a great deal of knowledge of fundamentals. It embraces the use of study casts, clinical evaluations, roentgenographic findings, and a broad knowledge of the treatment of caries and of the periodontium. It involves knowledge about where to decrease cusp height and

inclines and how to straighten out the occlusal plane when there are extruded teeth. Pulpless teeth must be evaluated. Splinting may be necessary. All these and many more details must be considered in good conformative dentistry.

NEED FOR TOTAL ORAL RECONSTRUCTION

Those situations which are impossible to treat this way will have to be corrected by more difficult methods. Not only must the dentist be specially trained himself in order to treat these complicated situations by means of complete occlusal reconstruction, but specially trained technicians must be available in order to execute the complex details. Where this work is left to commercial dental laboratories, the results only aggravate an already difficult situation. The commercial dental laboratories are not at fault, but the dentist is unable to carefully prescribe and then watch the procedure being executed. The result is often far from satisfactory.

GOLD INLAYS, THREE-QUARTER CROWNS, AND SIMPLE ARTICULATORS

In good conformative dental techniques, there is less need for complete coverage and more need for gold inlays, three-quarter crowns, or pinlays. Although full coverage has its good features, the greater percentage of full crowns need acrylic resin veneers. This is a source of trouble relative to the longevity of the veneers and to color. In addition, full crowns with multiple splinting cause more periodontal inflammation than do inlays or three-quarter crowns. In complete oral rehabilitation, the full crown is used frequently because the position of the tooth needs changing. This is not the situation in conforming the restoration to the existing occlusion. Although the appearance may not be as esthetic when gold inlays are employed, those other advantages make them my choice in many of my conformative cases. Where conformative dental procedures are being used, the articulator is not necessarily as important an adjunct as when the dentist is creating an entirely new occlusal pattern. Here again, the ability to use a semi-anatomic articulator, or even a plane line or unilateral articulator, serves to make a laborious task simpler.

CONCLUSIONS

The longer one practices, the greater respect he has for the infinite variations which manifest themselves in the forms and in the functioning of the masticatory apparatus of the patients who present themselves for treatment. The greater their confidence, the larger our responsibility. Long experience dictates that many of the mouths which were rehabilitated would have been much better treated by simple *good* dental procedures. The test of time will remain the most eloquent testimonial to the effectiveness of any treatment procedure. Careful documentation over a period of more than 25 years gives one a hindsight that is much more intelligent than his foresight. This hindsight encourages those who will listen to continue to perform more and more good dental procedures with sound

mechanical and physiologic principles and to avoid, wherever possible, intricate and dramatic techniques. There is a tremendous difference between philosophy and clinical practice. Let us, therefore, adhere to sound principles, involve little risk, and do our work within safe bounds. In other words—be conservative.

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