The Case for Gold Foil

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It was one hundred fifteen years ago this next month of November 1955 that the first group of students entered collegiate discipline for training in dentistry. In March of 1840 the Maryland legislature authorized the founding of the Baltimore College of Dental Surgery. With the fulfillment of this act, dentistry emerged truly as a profession in America.

In this 115-year span, the emphasis during the first 55 years was primarily upon the physical and mechanical features of restorative dentistry. This element predominated in the teaching of dentistry in the colleges of the country, and even in the face of warnings, persisted into the 1920's.

Exceptional practitioners of dentistry over the years had felt the lack of training in the basic sciences and a deficiency in their knowledge of the biochemistry of the human organism as it affected their dental activities. The thirst for wider knowledge of dentistry among the upper echelon of practitioners led to the formation of study groups. One such group, founded in 1912, soon learned the limitations of their self-directed seeking for knowledge and felt compelled to employ for instruction the services of a qualified biochemist. When the speaker entered dental college in 1922, the student interest and attention was primarily concentrated on technics and clinical units in operative and prosthetic procedures. The rapid advances which had occurred and were occurring in various technical procedures had made American dentistry unsurpassed in the world in that phase. Nevertheless, the paucity of sources of instruction in the basic sciences of histology, histopathology, growth and development, biochemistry, etc., caused the colleges to turn to Europe for teaching staffs in these subjects. Dental medicine in Germany and Austria had advanced far beyond the general American level, but restorative dentistry in all its phases had lagged sadly behind this country. Most of our European importations occurred in the two decades 1920 to 1940, and their influence is today at its peak in effect upon the profession. Great advances are occurring in periodontia, understanding of growth and development, and allied subjects. There appears now a trend allowing the biologic concept to overshadow restorative procedures and to relegate them to the less important position. Nutritional enthusiasts have seemed to feel that a dietary control plan for dental caries was ample excuse for faulty restorative procedures, and inferior but temporarily esthetic filling materials.

Dentistry has not been alone in this trend. Alert medical hospital staff officers some time ago recognized that the introduction of sulfonamides, antibiotics, wonder drugs, was encouraging less meticulous surgery, especially in abdominal fields, with consequent postoperative complications. This led to a general sharpening up of surgical procedures.

In Dentistry the pendulum has swung from the early mechanistic extreme to the opposite, and it is time now to re-examine the status of dental practice.

Dentistry is concerned with the control and prevention of dental disease, which primarily consists of dental caries, a disease of the hard tissues of the tooth, and with periodontal lesions, affecting the supporting and investing structures of the teeth.

Paffenbarger[1] in a recent article stated that because enamel has little or no ability

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to repair tissue destruction—as do all other body tissues with the single exception of the lense of the eye—much of dental therapy consists of surgery of the hard tooth tissues and of artificial repair with inert materials. These constitute the only known methods to repair the gross ravages of dental caries. These biomechanical procedures, which constitute the overwhelming majority of dental health service procedures, are both reparative and preventive.

The heart of dentistry lies in restorative procedures. The ideal of dentistry lies in prevention. Masterfully effected restorative dentistry constitutes one of the great factors in prevention.

This brings us to the Case for Gold Foil. No dentist would have the temerity to contradict that a gold foil restoration, where properly indicated and where properly placed and finished, constitutes the most permanent and enduring restoration of missing tooth substance possible. It must be realized, however, that gold foil fillings as propounded and practiced today are not identical with the procedures taught some thirty and more years ago. The basic principles outlined by G. V. Black many years ago still hold as true as ever. There have been, however, marked advances in cavity design and preparation. This has been made possible through the designing and manufacture of instruments of delicacy, refinement, and quality unknown many years ago. Added to these, the development of improved condensing instruments has facilitated and expedited the placement of enduring gold foil restorations. The result is one of the most economically satisfying procedures for both dentist and patient.

Indiscriminate use of gold foil through over-enthusiasm may well result in failures. But it is a well noted fact among practitioners habitually using gold foil where definitely indicated, that patients after experiencing their first such operation become as enthusiastic as the operator. When it is discovered that gold foils can be made relatively inconspicuous, the feeling of security and perfection offsets previous conceptions. The gold foil situation is very similar to that of patients faced with the necessity of full dentures: they have only seen the bad dentures—the good ones are never noticed. When their fears are proven groundless, they become staunch advocates for good dentistry and good dental health.

What of the dentist and gold foil? It has been the speaker's observation, and the view has been substantiated in all discussions with other observers, that the operator adept in gold foil invariably is an expert in all other operative procedures. It is a matter of common note that practitioners entering gold foil study clubs and receiving adequate and ample instruction in cavity preparation very quickly sharpen up their cavity procedures for all types of restorations accordingly. It has been very interesting to note in so many cases observed, the improvement in inlay margins in finished cases produced by practitioners after their participation in gold foil study clubs. It is almost axiomatic that a good gold foil operator is a good dentist.

What of gold foil and the student? An enthusiastic professor of operative dentistry —a superb operator in his own right, and one who has the ability to instill enthusiasm not only in his staff but in his students —has stated that he has found gold foil to be the most valuable instrument at his disposal for:

1. The teaching of refinement in restorative procedures.
2. Instilling a lasting respect for tooth structure in the minds of young preprofessional men.
3. A means of increasing digital dexterity and skill in the use of delicate cutting instruments.
4. The best means of teaching application and usage of the rubber dam, and proper adjustment of cervical and posterior clamps.
5. The imbuing of young men with an artistic sense and the type of idealism so essential to the ethical practice of the health profession, which in itself justifies the teaching of gold foil.[2]

It has been the speaker's pleasure to observe numerous operators in action who have been trained by this teacher quoted and his staff. The perfection, speed, and facility attained by these operators has been

most impressive. Furthermore, the same characteristics have extended to all other procedures undertaken by these dentists. Similar results have been produced by teachers in other parts of the country, and the effects of gold foil study clubs upon the practice of dentistry have put their stamp upon the character of practice in those areas where they exist and progress.

It is the intention of this American Academy of Gold Foil Operators today to demonstrate for your interest the procedures of gold foil operative dentistry as practiced today. This is not pure demonstration: it represents the actual types of operative procedures carried on daily in the offices of those demonstrating. You will note the facility in placing the rubber dam each of these men will demonstrate. It is likewise notable that operators accustomed to the use of the rubber dam for gold foil use it for almost all other operative procedures in the mouth. The late Jimmy Prime manufactured a pamphlet giving 57 reasons for using the rubber dam: it would appear that he had to labor and occasionally resort to repetition to produce this number but at the same time he had in there a great many valued points. There is one, however, which in the memory of the speaker at least, is absent, and it is one perhaps more important than many others: that is that there is light available on the actual field of operation almost three times that available in the same area when there is no rubber dam in place. This statement applies to the use of the dark rubber. Many of us have experimented with light, medium, and heavy weights, and varying opinions exist in this, each substantiated by the operator's individual preference. It has, however, been found advisable to use the dark rubber, since the light colors reduce the contrast and tend to produce a glare, fatiguing to the operator as well as obscuring to detail.

In summary, then:

1. The purpose of the practice of dentistry is the treatment and prevention of dental disease.
2. Since much of dental practice must be reparative in nature, only the most effective, most enduring, and most preventive measures should be used. The permanent improvement and maintenance of the patient's dental health is paramount.
3. Gold foil most nearly fulfills these requirements in the largest number of cases; but should only be used where positively indicated, and within the capabilities of the operator.
4. Every measure contributing to the development of better dentists should be employed in the schools, should be encouraged by the profession, should be fostered by the Boards of Dental Examiners. To that end, the American Academy of Gold Foil Operators sincerely solicits your continued interest and approval of gold foil technic as an examining measure for competency to practice dentistry.

References

1. Paffenbarger, G. C., et al., Dental Research—Current and Future. J. Am. Coll. Dent. XXII:1, March 1955.
2. Ingraham, Rex, Personal communication.