

EDUCATION

General Practice Residency/Advanced Education In General Dentistry Residency Guidelines For Implant Dentistry

Drs. Kenneth W.M. Judy* and Richard Kraut**

On November 9, 1990, the American College of Oral Implantology in conjunction with Albert Einstein College of Medicine/Montefiore Medical Center, the University of Pittsburgh, Harlem Hospital Center, Long Island College Hospital and Overlook Hospital, held a Consensus Conference to establish educational guidelines for Implant Dentistry at the G.P.R./A.E.G.D. level.

After several independent workshop sessions the guidelines were unanimously approved by all those present. They have been sent to all Directors of G.P.R. and A.E.G.D. programs for their personal commentary and will be forwarded to the American Association of Dental Schools for final approval and publication after a period of public review.

The guidelines development committee began its work early in 1990 and was Chaired by Dr. Richard Kraut, Director, Oral and Maxillofacial Surgery, Albert Einstein College of Medicine, Montefiore Medical Center. The Committee consisted of: Dr. Ronald Burakoff (The Long Island College Hospital, New York); Dr. R. Donald Hoffman (University of Pittsburgh, Pennsylvania); Dr. John Y.H. Ismail (University of Pittsburgh, Pennsylvania); Dr. Kenneth W.M. Judy (Harlem Hospital Center, New York); Dr. James McIntosh (Harlem Hospital Center, New York); Dr. Carl E. Misch (University of Pittsburgh, Pennsylvania); and Dr. Joseph Scancarrello (Overlook Hospital, New Jersey).

At the Consensus Conference on November 9th, presentations were made by:

Dr. Norman Trieger, Professor and Chairman, Dept. of Dentistry Oral and Maxillofacial Surgery, Albert Einstein College of Medicine, Montefiore Medical Center, New York.

Dr. John Ismail, Professor and Chairman, Dept. of Prosthodontics, University of Pittsburgh, Pennsylvania.

Dr. Kenneth Judy, Chief of Oral Implantology and Implant Prosthodontics, Harlem Hospital Center, New York.

Dr. Richard Kraut, Director, Oral and Maxillofacial Surgery, Albert Einstein College of Medicine, Montefiore Medical Center, New York.

Dr. Paul Schnitman, Chairman, Dept. of Implant Dentistry, Harvard School of Dental Medicine, Boston, Massachusetts.

Carolyn Gray of the American Association of Dental Schools lent her guidance and council as she did in Chicago at the Predoctoral Guidelines Consensus Conference.

The financial costs of this project were underwritten by The American College of Oral Implantology as well as through a generous grant from Core-Vent Corporation.

The Guidelines in their current form are published below.

*Chairman, Board of Directors, I.C.O.I.

**Director, Oral and Maxillofacial Surgery, Albert Einstein College of Medicine, Montefiore Medical Center.

Curriculum Guidelines In Implant Dentistry For General Practice Residency and Advanced Education In General Dentistry Programs

I. PREAMBLE

In the absence of guidelines for teaching implant dentistry in General Practice Residency Programs (GPR) and Advanced Education in General Dentistry Programs (AEGD), the American College of Oral Implantology, Albert Einstein College of Medicine, Montefiore Medical Center, and the University of Pittsburgh, School of Dental Medicine agreed in the Spring of 1990 to initiate a national conference for dental educators to develop such guidelines. The development process started in May, 1990, by the appointment of Richard A. Kraut, D.D.S. (Montefiore Medical Center, New York) to chair the committee to develop guidelines. A committee was formed and immediately began addressing its task. The committee was composed of Dr. Kenneth W.M. Judy (Harlem Hospital Center, New York), Dr. John Y.H. Ismail (University of Pittsburgh, Pennsylvania), Dr. R. Donald Hoffman (University of Pittsburgh, Pennsylvania), Dr. Carl E. Misch (University of Pittsburgh, Pennsylvania), Dr. James McIntosh (Harlem Hospital Center, New York), Dr. Ronald Burakoff (The Long Island College Hospital, New York), and Dr. Joseph Scancarello (Overlook Hospital, New Jersey). The national conference was held on November 9, 1990, at Montefiore Medical Center, in New York, to review and approve the curriculum guidelines for GPR and AEGD Programs relating to implant dentistry.

II. STATEMENT OF AUTHORSHIP

These guidelines for the teaching of implant dentistry were developed by the American College of Oral Implantology, Albert Einstein College of Medicine/Montefiore Medical Center, the University of Pittsburgh, Harlem Hospital Center, Long Island College Hospital and Overlook Hospital. They were presented, revised and approved by representatives of GPR and AEGD Programs at a national conference of dental educators. The revised guidelines were transmitted to the American Association of Dental Schools for approval and publication in the Journal of Dental Education. After a period of public comment, the guide-

lines will be reviewed and approved for publication by the A.A.D.S. Council Sections Administrative Board and Executive Committee. Any questions concerning these guidelines may be directed to the Executive Director. The guidelines are intended for use by individual educational institutions as curriculum development aids. There are not official policy statements of the sponsoring institutions and, as such, should not be construed as recommendations or restrictive requirements.

III. INTRODUCTION

The postdoctoral curriculum in implant dentistry is multidisciplinary and a readily identifiable curriculum. Implant dentistry, in these guidelines, is defined as, "that branch of dentistry pertaining to the restoration and maintenance of oral function, appearance and health of the patient, through replacement of teeth and contiguous structures with alloplastic dental implants and artificial substitutes."

IV. INTERRELATIONSHIP

Due to the multidisciplinary nature of the curriculum in implant dentistry, the following disciplines or services may be directly involved in the instructional aspects of this curriculum: prosthodontics, periodontics and oral and maxillofacial surgery. Other disciplines may be involved in the teaching of implant dentistry.

V. OVERVIEW

The curriculum in implant dentistry, as structured, is comprised of didactic and clinical components to provide basic learning experiences for GPR and AEGD residents. These learning modules present an approach to the biological and scientific bases for implant dentistry as well as (1) diagnosis, treatment planning, and implant selection, (2) implant placement and post-operative care, (3) prosthodontic procedures, (4) maintenance procedures, and (5) advanced implant procedures.

VI. PRIMARY EDUCATIONAL GOALS

A. To develop a comprehensive understanding of the history of, present status of, and future of implant dentistry.

B. To develop a scientific understanding of the available data involving implant-host relationships and interactions.

C. To develop clinical competency in diagnosis, treatment planning and maintenance procedures in implant dentistry.

VII. CORE CONTENT OUTLINE

A. History, Present, and Future

1. Epidemiology of edentulism
2. Historical perspective
3. Dental Implants: current status
4. Future directions

B. Dental Implants: Classification and Definitions

1. Classification and types of dental implants
2. Terminology and definitions
3. Implant systems and armamentaria

C. Scientific Basis for Dental Implant Therapy

1. Anatomy of hard and soft tissues
2. Implant - tissue interface
3. Biomechanics
4. Biomaterials
5. Surface Preparation

D. Diagnosis and Treatment Planning

1. Diagnostic procedures
2. Occlusal considerations
3. Treatment planning, site selection and implant selection
4. Patient preparation and education

E. Surgical Phase

1. Armamentarium
2. Preoperative preparation
3. Anesthesia
4. Site preparation and implant placement
5. Post-operative care
6. Management of complications

F. Restorative Phase

1. Single tooth replacement procedures
2. Fixed prosthodontic procedures
3. Fixed/detachable prosthodontic procedures
4. Removable prosthodontic procedures
5. Management of prosthodontic complications

G. Maintenance Phase

1. Professional care
2. Home care
3. Long term evaluation and corrective procedures

H. Advanced Implant Procedures

VIII. SPECIFIC BEHAVIORAL OBJECTIVES

Upon completion of this curriculum, the GPR and AEGD resident should be able to:

1. Discuss and explain the impact of edentulism as a health problem.
2. Summarize the historical contributions and the pioneering efforts in implant dentistry.
3. Define and describe different types of dental implants.
4. Describe anatomical considerations and limitations in relation in implant placement.
5. Understand all current diagnostic and imaging procedures for assessment of available bone quantity and quality.
6. Understand the biological basis (materials, mechanics, and bone physiology) and interactions between dental implants and host tissues.
7. Demonstrate an ability to conduct complete medical-dental history and physical evaluation of patients relating to dental implant procedures.
8. Recognize and identify local and systemic conditions which may influence the surgical and/or the prosthetic implant treatment, including anticipated behavioral response to treatment.
9. Recognize and perform referral procedures to medical and dental specialists, when indicated.
10. Demonstrate sequential planning for implant treatment, including alternative conventional treatments.
11. Demonstrate a protocol for patient preparation - dental, medical, psychological, financial and informed consent prior to placement of implants.
12. Demonstrate the basis for specific implant(s) selection.
13. Demonstrate pre-surgical prosthodontic preparation procedures.
14. Describe the preoperative, operative, and post-operative procedures for implant(s) placement.
15. Describe the follow-up procedures; and fabricate provisional prosthesis when indicated.
16. Describe the various prosthodontic procedures for implant supported and/or retained prostheses.
17. Recognize the use of grafting to provide bone volume for implant placement.
18. Recognize the applications of bone grafting and implants for maxillofacial reconstruction.
19. Recognize, treat or refer surgical and prosthodontic complications.

IX. GENERAL RECOMMENDATIONS

1. Individual program directors should have the prerogative to delineate the degree of residents' clinical participation in the surgical and/or prosthetic phases of implant therapy.
2. Program directors may involve the resident in clinical and applied research.
3. Programs should participate in a National Implant Registry.

X. FACULTY

Faculty should be composed of educationally qualified specialists, and those who have advanced education and/or appropriate experience in implant dentistry.

XI. FACILITIES

Adequate facilities currently exist to teach this proposed curriculum in dental schools and/or hospitals.

XII. REFERENCES

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SUBMITTED BY:

Committee for Development of Curriculum Guidelines for Postdoctoral Implant Dentistry
Richard A. Kraut, D.D.S., Chairman
Ronald Burakoff, D.M.D., Member
R. Donald Hoffman, D.M.D., Ph.D., Member
John Y.H. Ismail, D.M.D., Ph.D., Member
Kenneth W.M. Judy, D.D.S., Member
James McIntosh, D.D.S., Member
Carl E. Misch, D.D.S., M.D.S.
Joseph Scancarello, D.D.S., Member

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