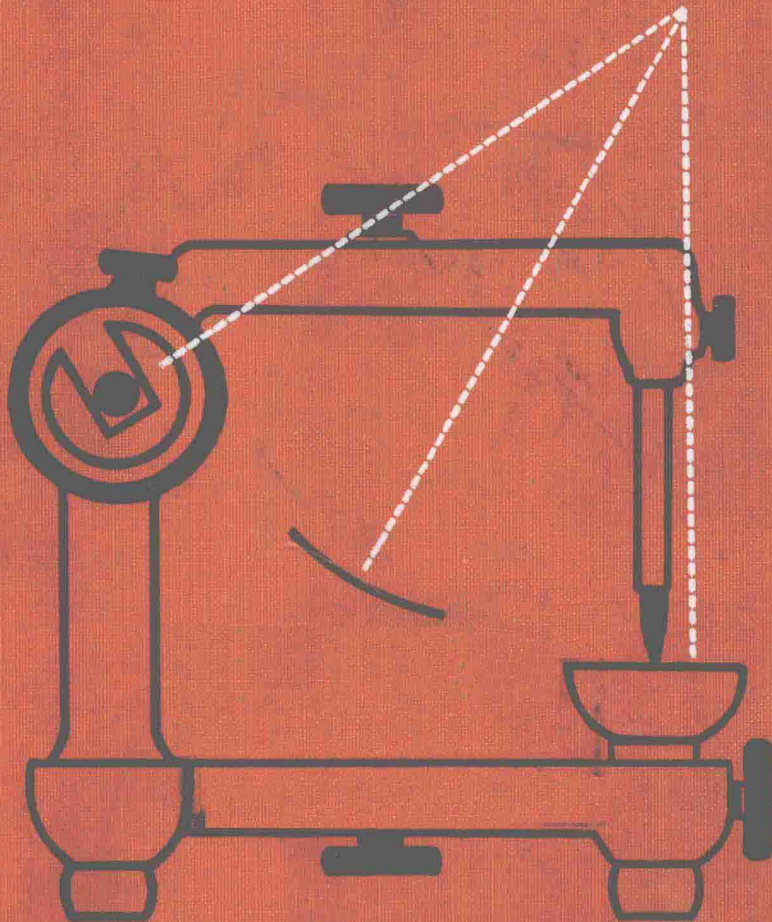


Essentials of
**COMPLETE
DENTURE
PROSTHODONTICS**



WINKLER

Essentials of
**COMPLETE
DENTURE
PROSTHODONTICS**

SHELDON WINKLER, D.D.S., F.A.C.D.

Professor and Chairman
Department of Removable Prosthodontics
School of Dentistry
Temple University
Philadelphia, Pennsylvania

and

Twenty-nine contributing authors

1979

W. B. SAUNDERS COMPANY/Philadelphia/London/Toronto

W. B. Saunders Company: West Washington Square
Philadelphia, Pa. 19105

1 St. Anne's Road
Eastbourne, East Sussex BN21 3UN, England

1 Goldthorne Avenue
Toronto, Ontario M8Z 5T9, Canada

Library of Congress Cataloging in Publication Data

Main entry under title:

Essentials of complete denture prosthodontics.

1. Complete dentures. I. Winkler, Sheldon. II. Title:
Complete denture prosthodontics. [DNLM: 1. Denture,
Complete. WU530 E78]

RK656.E84 617.6'92 78-14783

ISBN 0-7216-9464-0

Essentials of Complete Denture Prosthodontics

ISBN 0-7216-9464-0

© 1979 by W. B. Saunders Company. Copyright under the International Copyright Union. All rights reserved. This book is protected by copyright. No part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. Made in the United States of America. Press of W. B. Saunders Company. Library of Congress Catalog card number 78-14783.

Last digit is the print number: 9 8 7 6 5 4 3 2 1

To the memory of
my mother,
LILLIAN B. WINKLER,
and my brother,
ALLAN WINKLER.

CONTRIBUTORS

MARC B. APPELBAUM, D.D.S.

Assistant Clinical Professor, Department of Removable Prosthodontics, Temple University, School of Dentistry, Philadelphia, Pennsylvania.

The Posterior Palatal Seal

DOUGLAS A. ATWOOD, M.D., D.M.D.

Professor of Prosthetic Dentistry, Head of Department of Prosthetic Dentistry, Director of Clinic, Director of Postdoctoral Prosthodontics, Director of Maxillofacial Prosthetic Center, Harvard School of Dental Medicine.

The Problem of Reduction of Residual Ridges

L. RUSH BAILEY, D.D.S., F.A.C.D.

Professor of Prosthodontics, Indiana University, School of Dentistry; Prosthodontic Consultant, Veterans Administration Hospital, Marion, Indiana.

Recording Edentulous Jaw Relationships
Denture Repairs

JOHN F. BOWMAN, D.M.D., F.A.C.D., F.I.C.D.

Professor and Chairman, Department of Removable Prosthodontics, University of Florida, College of Dentistry, Gainesville, Florida.

Relining and Rebasing Techniques

ROBERT L. DEFranco, D.D.S., B.S.

Associate Professor, Department of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry.

Overdentures

ALAN J. DRINNAN, M.B., Ch.B., D.D.S.

Professor and Chairman, Department of Oral Medicine, State University of New York at Buffalo, School of Dentistry.

Anatomy and Physiology of the Edentulous Mouth
Oral Aspects of Systemic Diseases of Prosthodontic Interest

J. DAVID EICK, Ph.D.

Associate Professor and Director of Dental Biomaterials, Oral Roberts University, School of Dentistry.

Biologic Properties of Denture Base Materials

SAMUEL FRIEDMAN, D.D.S., F.A.C.P., F.A.C.D., F.I.C.D.

Clinical Professor of Removable Prosthodontics, New York University, College of Dentistry.

Diagnosis and Treatment Planning

JUAN B. GONZÁLEZ, D.D.S., M.S., F.A.C.D., F.A.C.P.

Assistant Professor of Dentistry, Mayo Medical School; Staff Prosthodontic Consultant, Prosthodontic Section, Department of Dentistry, Mayo Clinic and Mayo Foundation.

Vestibuloplasty

Elastomer Polymers for Denture Prosthesis

CHARLES MONROE HEARTWELL, JR., D.D.S., F.A.C.D.

Retired Professor of Removable Prosthodontics, Medical College of Virginia, School of Dentistry; Prosthodontic Consultant, McGuire Veterans Administration Hospital, Richmond, Virginia.

Conventional Immediate Complete Dentures

Treatment Plan for a Conventional Immediate Denture

NIKZAD S. JAVID, D.M.D., M.Sc., F.I.C.D.

Dean and Professor of Removable Prosthodontics, University of Tehran, School of Dental Medicine, Tehran, Iran.

Relining and Rebasing Techniques

LLOYD SHERWIN LANDA, D.D.S., M.S.D.

Clinical Associate Professor of Removable Prosthodontics, New York University, College of Dentistry.

Anterior Tooth Selection and Guidelines for Complete Denture Esthetics

BRIEN R. LANG, D.D.S., M.S.

Professor of Dentistry and Chairman, Complete Denture Department, University of Michigan, School of Dentistry.

Verification of Jaw Relation Records

FRANK RAYMOND LAUCIELLO, D.D.S.

Clinical Assistant Professor, State University of New York at Buffalo, School of Dentistry; Chief of Prosthodontics and Director of the Prosthodontics Residency Program, Veterans Administration Medical Center, Buffalo, N.Y.

The Single Complete Maxillary Denture

LEONARD I. LINKOW, D.D.S., F.A.G.D., F.A.A.I.D., F.I.C.O.I.

Visiting Professor, Nihon University, Tokyo, Japan; Visiting Lecturer, Fixed Prosthodontics, Loyola University, Maywood, Illinois; Postgraduate Clinician, Continuing Education Program, U.C.L.A.; Associate Attending Chief, Oral Implantology, Jewish Memorial Hospital, New York, N.Y.

Implants for Edentulous Arches

NORMAN D. MOHL, D.D.S., M.A., Ph.D.

Professor of Oral Medicine, State University of New York at Buffalo, School of Dentistry; University Associate in Dental Medicine, Buffalo General Hospital.

Anatomy and Physiology of the Edentulous Mouth

HAROLD FREDERICK MORRIS, D.D.S., M.S.

Associate Professor, Department of Biomaterials, University of Detroit, School of Dentistry, Detroit, Michigan; Staff Prosthodontist, Veterans Administration Hospital, Allen Park, Michigan.

Recording Bases and Occlusion Rims

ABRAHAM E. NIZEL, D.M.D., M.S.D., F.A.C.D.

Professor of Nutrition and Preventive Dentistry, Tufts University, School of Dental Medicine; Visiting Associate Professor of Nutrition and Metabolism, Massachusetts Institute of Technology, Cambridge, Massachusetts.

Role of Nutrition in the Oral Health of the Aging Patient

ROBERT E. OGLE, D.D.S.

Assistant Professor, Department of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry.

Preprosthetic Surgery

HAROLD R. ORTMAN, D.D.S.

Professor and Chairman, Department of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry; Consultant to: Veterans Administration Hospital, Buffalo, N.Y.; Veterans Administration Hospital, Batavia, N.Y.; Eastman Dental Center, Rochester, N.Y.; Roswell Park Memorial Institute, Buffalo, N.Y.; E. J. Meyer Memorial Hospital, Buffalo, N.Y.

Complete Denture Occlusion

Arrangement of the Posterior Teeth

LANCE F. ORTMAN, B.A., D.D.S.

Assistant Professor, Department of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry.

Arrangement of the Posterior Teeth

Patient Education and Complete Denture Maintenance

S. HOWARD PAYNE, D.D.S., F.A.C.D., F.A.D.P.

Clinical Professor, Department of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry; Consultant, Veterans Administration Hospital, Buffalo, N.Y.; Consultant, E. J. Meyer Memorial Hospital, Buffalo, N.Y.; Courtesy Staff, Children's Hospital, Buffalo, N.Y.

The Trial Denture

A Transitional Denture

FORREST R. SCANDRETT, D.D.S., M.S., F.A.C.P.

Associate Professor and Head of Removable Prosthodontics, University of Iowa, College of Dentistry; Diplomate of the American Board of Prosthodontics; Consultant, Veterans Administration Hospital, Iowa City, Iowa.

Articulators in Complete Denture Construction

NORMAN G. SCHAAF, D.D.S., F.I.C.D.

Professor of Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry; Chief, Department of Dentistry and Maxillofacial Prosthetics, Roswell Park Memorial Institute, Buffalo, N.Y.; Staff, General Hospital, Buffalo, N.Y.; Staff, Veterans Administration Hospital, Buffalo, N.Y.

Obturbators on Complete Dentures

HERBERT SHERMAN, D.D.S.

Associate Professor, Department of Removable Prosthodontics, New York University, College of Dentistry.

Denture Insertion

GEORGE E. SMUTKO, B.A., D.D.S., M.S.

Associate Professor, Director of Graduate Removable Prosthodontics, State University of New York at Buffalo, School of Dentistry; Consultant in Prosthodontics, Veterans Administration Hospitals, Buffalo, N.Y., and Erie, Pennsylvania.

Making Edentulous Impressions

JOHN E. WARD, B.A., D.D.S., M.S.D.

Assistant Professor, Virginia Commonwealth University, Medical College of Virginia, School of Dentistry.

Laboratory Procedure Authorizations and Communicating with Dental Laboratory Technicians

SHELDON WINKLER, D.D.S., F.A.C.D.

Professor and Chairman, Department of Removable Prosthodontics, Temple University, School of Dentistry, Philadelphia, Pennsylvania.

Prosthodontics Today

Recording Edentulous Jaw Relationships

The Geriatric Complete Denture Patient

JULIAN B. WOELFEL, D.D.S., F.I.C.D., F.A.C.D.

Professor, Divisions of Prosthodontics, Dental Materials, and Dental Hygiene, The Ohio State University College of Dentistry.

Processing Dentures

JAMES D. WOODWARD, D.M.D., M.Ed.

Associate Professor and Director of Removable Prosthodontics, Oral Roberts University, School of Dentistry.

Biologic Properties of Denture Base Materials

PREFACE

There are many excellent textbooks on complete dentures available today. However, there is always room for improvement. In 1975, after almost twenty years as a dental educator, I approached the W. B. Saunders Company about the possibility of compiling and editing a textbook on complete denture prosthodontics, with the stipulation that it first appear in abbreviated form as a Dental Clinics of North America symposium. This was done to gauge the reaction of students, general practitioners, and specialists to the project's merits, faults, and possible acceptance as a freestanding textbook. Thankfully, the April 1977 Clinics issue on "Complete Dentures" was extremely well received, and the decision to develop it into a textbook was made.

The Clinics issue has been greatly expanded, with fourteen entirely new chapters added. Many of the Clinics' chapters have been thoroughly revised with new material, illustrations, and references, and with some chapters barely recognizable from their preliminary form in the symposium. In some cases it was decided to reprint the Clinics' chapters with a minimum of revision. These decisions were made by the editor in consultation with the contributing authors.

This text follows the trend in prosthodontic education, which has changed from a mechanical or engineering viewpoint to a biologic approach. Dentures rest on vital, sensitive, resilient tissues. Today's dentist must have a thorough background in anatomy, physiology, pathology, psychology, pharmacology, materials science, and nutrition, as well as physics. He must be able to relate this knowledge to complete denture construction. Without this broad educational background, the development of clinical skills and judgment are impossible.

There is bound to be some repetition in the various chapters of a multi-contributor book. This is particularly evident in Part II (The Construction of Complete Dentures). A good deal of repeated material from the chapters as originally submitted has been eliminated, but at the same time some material presented elsewhere was retained to enable each chapter to be a complete entity by itself. When doubt existed, the conservative approach was taken with the repeated material retained. Hopefully, the repetitions will serve to reinforce the fundamental principles and prosthodontic concepts involved.

The editor acknowledges with gratitude the teaching, inspiration, and dedication of his teachers and later associates at New York University College of Dentistry, as well as his colleagues at the School of Dentistry, State University of New York at Buffalo, and later at Temple University School of Dentistry. Those deserving special recognition include the late Drs. George A. Buckley and Arthur Davidoff; and Drs. Louis Blatterfein, Samuel Friedman, Morris Mac Hudis, and Herbert Sherman at New York University College of Dentistry; and Drs. George W. Ferguson, Harold R. Ortman, and S. Howard Payne at the State University of New York at Buffalo.

All of the contributors have given generously of themselves during the preparation of this volume. Their enthusiasm and willingness to cooperate in spite of many other commitments, and in some cases ill health, has made the editor's job a most rewarding and pleasant experience. It is sincerely appreciated. It is also a source of pride to the editor to include a number of his former students as contributors.

The photographic talents of Mr. Malcolm McCuaig are evident throughout the volume. The invaluable editorial and secretarial assistance of my wife Sandra is once again acknowledged.

The editor wishes to express his appreciation to Mr. Carroll C. Cann, Mr. Robert W. Reinhardt, and their associates at W. B. Saunders Company, whose help and suggestions were more than any editor could hope for. Our copy editor at W. B. Saunders Company, Mr. Bill Lamsback, patiently and diligently worked along with the contributors and editor and has been of invaluable assistance during the preparation of this textbook.

SHELDON WINKLER, D.D.S.

CONTENTS

<i>Introduction</i>	
PROSTHODONTICS TODAY	1
Sheldon Winkler, D.D.S.	
PART ONE THE EDENTULOUS PATIENT	
<i>Chapter 1</i>	
ANATOMY AND PHYSIOLOGY OF THE EDENTULOUS MOUTH.....	7
Norman D. Mohl, D.D.S., M.A., Ph.D.	
Alan J. Drinnan, M.B., Ch.B., D.D.S.	
<i>Chapter 2</i>	
ORAL ASPECTS OF SYSTEMIC DISEASES OF PROSTHODONTIC INTEREST.....	22
Alan J. Drinnan, M.B., Ch.B., D.D.S.	
<i>Chapter 3</i>	
THE PROBLEM OF REDUCTION OF RESIDUAL RIDGES.....	38
Douglas A. Atwood, M.D., D.M.D.	
PART TWO THE CONSTRUCTION OF COMPLETE DENTURES	
<i>Chapter 4</i>	
PREPROSTHETIC SURGERY	63
Robert E. Ogle, D.D.S.	
<i>Chapter 5</i>	
VESTIBULOPLASTY: AN AID IN DENTURE CONSTRUCTION	90
Juan B. González, D.D.S., M.S.	
<i>Chapter 6</i>	
DIAGNOSIS AND TREATMENT PLANNING	111
Samuel Friedman, D.D.S.	
<i>Chapter 7</i>	
ELASTOMER POLYMERS FOR DENTURE PROSTHESES	123
Juan B. González, D.D.S., M.S.	

<i>Chapter 8</i>	
MAKING EDENTULOUS IMPRESSIONS	141
George E. Smutko, D.D.S.	
<i>Chapter 9</i>	
THE POSTERIOR PALATAL SEAL	171
Marc Appelbaum, D.D.S.	
<i>Chapter 10</i>	
RECORDING BASES AND OCCLUSION RIMS	193
Harold F. Morris, D.D.S., M.S.	
<i>Chapter 11</i>	
ARTICULATORS IN COMPLETE DENTURE CONSTRUCTION	216
Forrest R. Scandrett, D.D.S., M.S.	
<i>Chapter 12</i>	
RECORDING EDENTULOUS JAW RELATIONSHIPS.....	263
L. Rush Bailey, D.D.S.	
Sheldon Winkler, D.D.S.	
<i>Chapter 13</i>	
ANTERIOR TOOTH SELECTION AND GUIDELINES FOR COMPLETE DENTURE ESTHETICS	282
Lloyd Sherwin Landa, D.D.S., M.S.D.	
<i>Chapter 14</i>	
COMPLETE DENTURE OCCLUSION.....	301
Harold R. Ortman, D.D.S.	
<i>Chapter 15</i>	
ARRANGEMENT OF THE POSTERIOR TEETH	342
Harold R. Ortman, D.D.S.	
Lance F. Ortman, D.D.S.	
<i>Chapter 16</i>	
VERIFICATION OF JAW RELATION RECORDS.....	389
Brien R. Lang, D.D.S., M.S.	
<i>Chapter 17</i>	
THE TRIAL DENTURE.....	409
S. Howard Payne, D.D.S.	
<i>Chapter 18</i>	
LABORATORY PROCEDURE AUTHORIZATIONS AND COMMUNICATING WITH DENTAL LABORATORY TECHNICIANS.....	416
John E. Ward, D.D.S.	
<i>Chapter 19</i>	
PROCESSING DENTURES	436
Julian B. Woelfel, D.D.S.	
<i>Chapter 20</i>	
DENTURE INSERTION.....	449
Herbert Sherman, D.D.S.	

PART THREE MAINTENANCE OF COMPLETE DENTURES

Chapter 21
PATIENT EDUCATION AND COMPLETE DENTURE MAINTENANCE 467
Lance F. Ortman, B.A., D.D.S.

Chapter 22
ROLE OF NUTRITION IN THE ORAL HEALTH OF THE AGING PATIENT..... 480
Abraham E. Nizel, D.M.D., M.S.D.

Chapter 23
RELINING AND REBASING TECHNIQUES 493
Nikzad S. Javid, D.M.D., M.Sc.
John F. Bowman, D.M.D.

Chapter 24
DENTURE REPAIRS..... 505
L. Rush Bailey, D.D.S.

PART FOUR SPECIAL TECHNIQUES AND PROBLEMS

Chapter 25
CONVENTIONAL IMMEDIATE COMPLETE DENTURES..... 517
Charles M. Heartwell, Jr., D.D.S.

Chapter 26
TREATMENT PLAN FOR A CONVENTIONAL IMMEDIATE DENTURE..... 538
Charles M. Heartwell, Jr., D.D.S.

Chapter 27
A TRANSITIONAL DENTURE 569
S. Howard Payne, D.D.S.

Chapter 28
OVERDENTURES 581
Robert L. DeFranco, D.D.S.

Chapter 29
OBTURATORS ON COMPLETE DENTURES 604
Norman G. Schaaf, D.D.S.

Chapter 30
THE SINGLE COMPLETE MAXILLARY DENTURE..... 619
Frank R. Lauciello, D.D.S.

Chapter 31
IMPLANTS FOR EDENTULOUS ARCHES..... 633
Leonard I. Linkow, D.D.S.

Chapter 32
THE GERIATRIC COMPLETE DENTURE PATIENT..... 695
Sheldon Winkler, D.D.S.

Chapter 33

BIOLOGIC PROPERTIES OF DENTURE BASE MATERIALS..... 715

 J. David Eick, Ph.D.

 James D. Woodward, D.M.D., M.Ed.

Index..... 721

INTRODUCTION

PROSTHODONTICS

TODAY

Complete denture prosthodontics involves the replacement of the lost natural dentition and associated structures of the maxilla and mandible for patients who have lost all their remaining natural teeth or are soon to lose them. Overdentures allow potential complete denture candidates to retain one or more natural teeth or roots to provide more favorable support and stability for the resultant denture, with the preservation of alveolar bone being perhaps a far more important concurrent end result. As complete dentures are the last consideration for the patient, arrived at only when all other avenues have been closed, they must be designed and constructed with an emphasis on the preservation of the remaining oral structures.

OBJECTIVES OF COMPLETE DENTURE PROSTHODONTICS

The basic objectives of complete denture prosthodontics are the restoration of function, facial appearance, and the maintenance of the patient's health. The complete denture wearer should be able to speak distinctly and experience oral comfort. The patient should also be educated in the importance of periodic examination and subsequent treatment when necessitated by changes in the supporting tissues.

The mastication of food with complete dentures assists the edentulous patient in obtaining adequate nutrition. However, complete dentures constructed even under the most ideal conditions will have a chewing efficiency of only a fraction of that of the natural dentition. The patient must understand and accept the reduced efficiency of the artificial dentition.

To a great number of patients, esthetics is paramount. Fortunately, today it is possible for the dental profession to consistently fabricate virtually undetectable complete dentures that simulate the harmonious positions and relationships of the lost natural teeth during speech, mastication, and rest. The emotional and psychologic effects of improved appearance can create a new outlook on life for many patients.

The unrealistic esthetic demands of some patients may not be possible to achieve for biologic or mechanical reasons. Changes in the supporting structures in later years can necessitate a change in tooth position to improve stability and function that may adversely affect esthetics.

Edentulous patients should be able to speak clearly and distinctly with complete dentures. If possible, correction of speech defects as a result of the absence of the natural dentition or from the unsatisfactory arrangement of teeth in existing dentures should be incorporated into the new dentures. Artificial teeth should duplicate the size and contour of the missing teeth and occupy as closely as possible the previous positions of their lost predecessors.

The loss of teeth affects different people in a variety of ways. While the majority of edentulous patients adapt readily, there are those who continually regret the eden-

tulous state and who cannot accept or adjust to the limitations of complete dentures. Unfortunately, there are some patients who never will master the use of complete dentures.

THE NEED FOR PROSTHODONTIC CARE

While the introduction of fluoridation and other preventive measures will undoubtedly have an effect on the incidence of dental caries and the resultant tooth loss of our population, it is unfortunate that the benefits to the edentulous patient of today are nonexistent. In 1971 an estimated 22.6 million Americans were edentulous, about half of whom were over 65 years of age. The Bureau of Economic Research and Statistics of the American Dental Association reported that, in 1975, out of a total civilian population of 211,445,000 the number of edentulous persons in the United States had reached 23,500,000. Krajicek¹ has estimated that by the year 2000 there will be 28,100,000 edentulous persons in the United States out of a total population projection of 260,378,000.

The increasing population and the larger number of people who live to old age, the large number of Americans covered by some type of dental health insurance or government program, and the increased dental awareness on the part of the public have led to a demand for prosthodontic care that is at a record level. Since the number of prosthodontists is limited in spite of the ever increasing number of dentists who enter specialty training programs, the general practitioner will be responsible for providing the vast majority of this care.

Research probably will not produce any dramatic change in the prosthodontic needs of our population in the near future. There are several reasons for this. Dental diseases are complex and their prevention has, to date, defied the efforts of a great number of sophisticated researchers. There will be a continued need for complete dentures until knowledge of the causes, treatment, and prevention of dental caries and periodontal disease is complete.

The research support allotted the profession is grossly inadequate when correlated with the magnitude of dental disease. Future available research money could conceivably be used to cope with improved delivery systems and the increased demand for dental care rather than investigations into the causes and prevention of dental disease.

The prosthodontic needs of our population are monumental and most probably will remain that way at least for the next generation.

PROBLEMS FACING PROSTHODONTICS

Illegal Practice of Dentistry

There is a trend in many dental schools to have dental technicians perform an ever increasing share of the laboratory phase of prosthetic dentistry. Dentists already delegate too much of the fabrication of dentures to commercial laboratories. The unfortunate result is a greater dependency of the student and dentist on the laboratory technician, with some members of the profession relying more and more on the judgment of auxiliary personnel. If a dentist cannot perform all the phases involved in providing prosthetic service for his patients, he cannot understand, prescribe for, and direct the fabrication of a prosthesis for which he alone is responsible.

The competent dental technician is an integral part of the dental health team. Unfortunately, too much dependence by the dentist on commercial dental laboratories

can lead some technicians to believe they know more about prosthodontics than dentists and that they consequently should be permitted to deal directly with the public.

Communication, cooperation, and mutual respect must exist between the dentist and the dental laboratory technician. Detailed work authorizations must accompany all material sent to a commercial dental laboratory, which obviously must be of the highest quality. The dental laboratory technician must be guided and taught how to translate the dentist's instructions into a superior prosthesis. Patients should not be sent to dental laboratories for any reason. Laxity on the part of the dental profession could result in the loss of prosthodontics, which is far too important a health service to turn over to unqualified personnel.

Dental Materials

In recent years, the profession has witnessed the introduction and subsequent withdrawal from the market of numerous unsatisfactory prosthodontic products and techniques. The profession was forced to field test many of these unsatisfactory products and techniques for dental manufacturers and responded by discarding them. Unfortunately, these unsatisfactory products should never have reached the market in the first place. As long as there is little or no control over what dental manufacturers can place on the market for restorative and preventive purposes, it is up to the individual dentist to exercise utmost caution over the products he uses.

Where American Dental Association Specifications exist for specific product groups, dentists are urged to limit themselves to using certified materials. The specification and certification programs of the American Dental Association have been designed to enable the dentist to select the most suitable products for his dental health services, with the thought that concern for the patient's well-being is paramount. Every dentist should have for reference a copy of the latest edition of *Guide to Dental Materials and Devices*, which is available from the American Dental Association.

Curriculum Curtailment

Recent years have witnessed a shift in many dental school curriculums from a restorative orientation to a preventive approach, with certain specialties receiving more emphasis and others receiving less. Sharry¹⁰ has reported that prosthodontics is losing curriculum time in all but five of 46 American dental schools that responded to a recent survey. Unfortunately, this deemphasis or reduction in prosthodontic training has resulted in a decrease in student contact hours, both didactic and clinical.

The mounting demand for prosthodontic care mandates curriculum committees to maintain (and perhaps even increase) the time devoted to prosthodontics. While improving the quality of instruction and making the most effective and efficient use of the hours allotted to prosthodontics can compensate in a small way, there can be no substitute for clinical experience. Adequate patient contact hours are essential to develop the skills, manual dexterity, and clinical judgment necessary for the successful practice of prosthodontics.

THE FUTURE

While the future will undoubtedly bring new concepts, new techniques, and better materials with concurrent improvements in diagnosis, treatment planning, and denture