



Successful Local Anesthesia for Restorative Dentistry and Endodontics







Successful Local Anesthesia

FOR RESTORATIVE DENTISTRY AND ENDODONTICS

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Dedication

This book is dedicated to the current and former endodontic graduate students who shared our goal of profound pulpal anesthesia.



Preface

Why do patients avoid going to the dentist? According to a survey by the American Dental Association,¹ fear of pain is the greatest factor that prevents patients from visiting their dentist. Additional surveys^{2,3} have found that 90% of dentists have some anesthetic difficulties during restorative dentistry procedures. Because adequate pulpal anesthesia is a clinical problem, we and other authors have performed a number of research studies on local anesthesia over the last 25 years. We are excited to present some of these findings in this book.

Profound pulpal anesthesia is a cornerstone to the delivery of dental care. Administration of local anesthesia is one of the most common procedures in clinical practice. It is invariably the first procedure we perform, and it affects almost everything we do during that appointment. If the patient is not adequately anesthetized and you have some extensive restorative work planned, difficulties arise. The information in this book explains why problems occur and offers clinical solutions to help clinicians stay on schedule.

Fortunately, local anesthesia has evolved tremendously over the last 20 years just as the materials and techniques have evolved in restorative dentistry and endodontics. The current technology and drug formulations used for local anesthesia have made it so much easier to treat patients successfully. We now have the ability to anesthetize patients initially, provide anesthesia for the full appointment, and reverse some of the effects of soft tissue anesthesia if desired. Priceless!

This book covers the research-based rationale, advantages, and limitations of the various anesthetic agents and routes of administration. A special emphasis is placed on supplemental anesthetic techniques that are vital to the practice of dentistry. However, this book does not cover the basic techniques utilized for the delivery of local anesthetics because that information is readily available elsewhere in textbooks and publications.

In addition, this book emphasizes information for the restorative dentist and endodontist because the requirements for pulpal anesthesia are different than for oral surgery, implant dentistry, periodontics, and pediatric dentistry. Eighty-five percent of local anesthesia teaching in dental school is done by oral and maxillofacial surgery departments,⁴ and while they do an excellent job, it is sometimes difficult for oral surgeons to appreciate the requirements for pulpal anesthesia in restorative dentistry and endodontic therapy.

Throughout the book, the information has been divided into specific topics so it is understandable and easy to reference. When indicated, summary information has been provided. References to published literature are included in the chapters because clinicians within the specialty of endodontics (of which we are members) communicate with each other by quoting authors and studies. We also think it is important to credit the authors for their contributions to the literature on local anesthesia.

This book is a clinical adjunct to help you successfully anesthetize patients using the newest technology and drugs available. Indeed, the information presented here will help you to provide painless treatment. Pulpal anesthesia will be emphasized throughout this book. That is, pulpal anesthesia will be required by the restorative dentist and endodontist in order to perform painless treatment. We think that is a worthy goal for the dental profession.

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All royalties from the sale of this book will be equally divided between the American Association of Endodontist's Foundation and The Ohio State University Endodontic Graduate Student Research Fund to support further research on anesthesia and pain control.