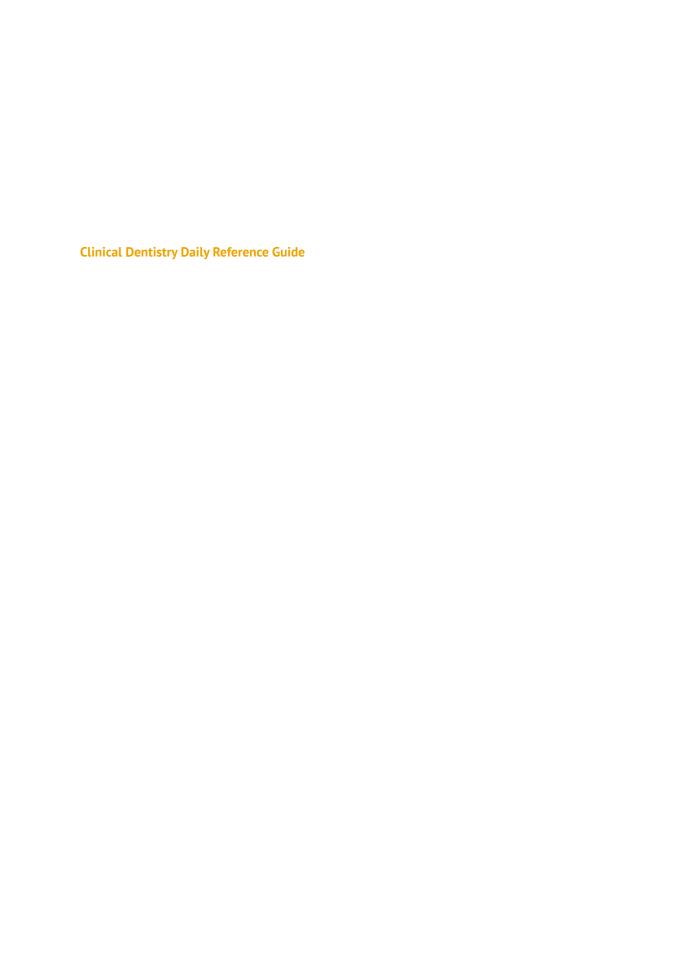
CLINICAL DENTISTRY DAILY REFERENCE GUIDE



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Clinical Dentistry Daily Reference Guide

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About the Author



Courtesy: Kevin Fiscus Photography

Dr. William Jacobson is a general dentist and an educator. He completed his Bachelor of Arts in Fine Arts at University of San Francisco. Dr. Jacobson received a Doctor of Dental Medicine, Master of Public Health, and various awards of recognition at Case Western Reserve University. To further his training, he completed a General Practice Residency at University of Southern California where he treated medically compromised patients at LAC+USC Medical Center and at the Los Angeles Veterans Affairs. Since completing residency, Dr. Jacobson has been practicing general dentistry at community clinics treating the underserved. He is an Assistant Clinical Professor at University of California, San Francisco School of Dentistry. Dr. Jacobson is also a consultant for the curriculum committee at California Northstate University, College of Dental Medicine.

Dr. Jacobson is a member of the American Dental Association, California Dental Association, and the Sacramento District Dental Society. He is a native Spanish speaker and in his free time enjoys painting.

To contact the author, email CDDRGauthor@gmail.com

Preface

Why I Wrote this Book?

Picture the following scenario. Monday morning you arrive to work:

- **8 a.m.** You need to figure out how to calculate the dosage for amoxicillin in liquid form for a 40-pound child.
- **9 a.m.** A teenager shows up with an avulsed tooth from a skateboard accident and you need to review the dental trauma guidelines before treating the patient.
- **10 a.m.** A patient is requesting nitrous oxide sedation for a filling and you need to quickly review all the indications, contraindications, and steps for administering nitrous, since it has been over a year since you last did this.
- **11 a.m.** A patient comes in for an extraction and reports a history of radiation and chemotherapy and you are unsure if any treatment modifications are necessary.
- **11 a.m.** You are double booked with a patient whose cast metal partial denture just broke and you are not sure what the dental lab needs from you. Just the broken partial? An opposing impression? A bite? A pick-up impression?

The scenarios are endless and it can be overwhelming having to scramble through various sources, from consulting other providers to websites to phone apps to books, to find critical information in a timely manner in order to provide our patients with the safest and best possible care.

The philosopher Plato said, "necessity is the mother of invention," and for me as a practicing dentist and educator, a book like this is indispensable. For this reason, I made it my goal to write this book to make our lives easier as dentists.

The Journey from Conception to a Published Book

In dental school we entered clinic full time in third year. To cope with the fears that came along with treating human patients (non-manikin) for the first time, I made it my mantra to "learn from every patient encounter," regardless of the procedure. Every night I would go home and write in my journal. These "daily lessons" included reflecting on the clinical experiences of the day, along with researching answers to questions my patients would ask or I would ask myself. Later I learned that this is referred to as self-directed learning. The "daily lesson" journal entries continued through my General Practice Residency, working at community clinics, and teaching dental students. While teaching dental students at UCSF I came to realize that these students could benefit from my "daily lessons" journal entries that are mostly collecting dust on a bookshelf.

xxii Preface

Someone told me "if you have dreams chase them." Writing this book was one of my dreams and I was determined to realize it, but how? One day I sat on my sofa staring at my bookshelf of dental books. I homed in on the names of the various publishing companies and decided to pitch my idea to them with a formal book proposal. I was ecstatic to hear that John Wiley & Sons, Inc. was intrigued and believed in my vision.

Writing a book is an arduous process. Many challenges were faced, including how to create a book that is both concise and comprehensive, how to write to an audience ranging from dental students to seasoned dentists, how to make time to write a book while teaching dental students and working at a community clinic, and finding dental and medical professionals willing to offer their time to review my chapters.

The manuscript writing process involved clinical information from many sources. I consolidated my "daily lessons" notes from dental school, general practice residency and practicing dentistry, and teaching dental students. Contributions also came from continuing education courses, textbooks, and journal articles. I added my clinical photos, made illustrations, created tables, and obtained permissions to reprint clinical guidelines and figures from various sources. Lastly I consulted with general dentists, dental specialists, lab technicians, pharmacists, pediatricians, academicians, and dental assistants.

To my Readers

Thank you for your support! Whether you are a dental student, a dental resident, a new graduate, a seasoned dentist, a dental educator, or other dental professional, I hope this book provides you with the tools you need to offer the safest, ethical, and best dentistry you can for your patients.

If you have questions or suggestions contact me at CDDRGauthor@gmail.com

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Thank you John Wiley & Sons, Inc. for believing in my vision and for giving me this opportunity to create a book designed to help dental professionals navigate dentistry which ultimately helps patients. A special thank you to Erica, Tanya, Ranjit, Hari, Susan, and Angela at Wiley.

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Thank you to my students that inspire me, and to my patients who are my greatest teachers. Thank you to my friends, family, and colleagues for your encouragement, especially:

- Mom, gracias por todo que me has dado, tu amor, pacencia, y tiempo.
- Dad, for your wisdom, for helping me keep things in perspective, and for never making me feel like a loser.
- John, my brother, for being a visionary and for assuring me during the days of my pre-dental science courses that the other students in my classes did not have higher IQs than me but that success comes by working hard.
- Larissa, my big sister, for always brightening my day no matter how gray.
- My best friend Catherine for being my boulder, my confidant, and my muse.
- And to Pamela Caviness, my previous Dental Director and now friend, for telling me "Don't doubt yourself for a second" before embarking on this project.

List of Abbreviations

AAE American Association of Endodontists
AAO American Association of Orthodontists
AAOS American Academy of Orthopedic Surgeons

AAP American Academy of Pediatrics; American Academy of Periodontology

AAPD American Academy of Pediatric Dentistry

AAT animal-assisted therapy

AB antibiotics

ADA American Dental Association AED automated external defibrillator

AIDS acquired immunodeficiency syndrome

ALT alanine aminotransferase AMA Against Medical Advice (form)

Appt appointment

aPTT activated partial thromboplastin time

ART antiretroviral therapy
AST aspartate aminotransferase

ASAP as soon as possible

B buccal

BLS Basic Life Support
BMI body mass index
BOP bleeding on probing
BP blood pressure
bpm beats per minute

BRONJ bisphosphonate-related osteonecrosis of the jaw

BW bitewing (radiograph)
CABG coronary artery bypass graft
CAL clinical attachment level

CAMBRA Caries Management by Risk Assessment

CAR conservative adhesive restoration

CBC complete blood count

CBCT cone beam computed tomography

CC chief complaint

CDC Centers for Disease Control and Prevention

CDT Current Dental Terminology
CEJ cementoenamel junction

xxvi List of Abbreviations

Chp chapter

COE comprehensive oral evaluation catechol-O-methyltransferase COMT

COPD chronic obstructive pulmonary disease CPAP continuous positive airway pressure

CPR cardiopulmonary resuscitation

CR centric relation

cerebrovascular accident CVA

D distal

DEA **Drug Enforcement Administration**

DMdiabetes mellitus date of birth DOB DP distal palatal

DVT deep vein thrombosis

ethylenediaminetetraacetic acid EDTA

for example e.g.

EMS emergency medical services

EOE extraoral exam ER emergency room

F facial

FDA Food and Drug Administration

full-mouth examination **FMX** FPD fixed partial denture

gastroesophageal reflux disease GERD

GI glass ionomer

HBSS Hanks' balanced salt solution

HCR high caries risk

Health Insurance Portability and Accountability Act HIPAA

HIV human immunodeficiency virus

HOCL height of contour line HPV human papillomavirus

HTN hypertension

high volume evacuator HVE inferior alveolar nerve block IANB

i.e. that is

INR international normalized ratio

IOE intraoral exam

IRT interim therapeutic restorations

IV intravenous L lingual

LED light-emitting diode

LSTR lesion sterilization/tissue repair

mesial M

MAOI monoamine oxidase inhibitor

ΜI myocardial infarction MICP maximum intercuspation

Misc miscellaneous

morphine milligram equivalents MME

MP mesial palatal MR marginal ridge

maximum recommended dose MRD

MRONJ medication-related osteonecrosis of the jaw MRSA methicillin-resistant Staphylococcus aureus

MS multiple sclerosis

MTA mineral trioxide aggregate

National Institute for Dental and Craniofacial Research NIDCR

NPI National Provider Identifier

NSAID nonsteroidal anti-inflammatory drug

NV next visit O occlusal

OCS oral cancer screening OHI Oral Hygiene Index

oral and maxillofacial surgeon OMFS

ORN osteoradionecrosis OTC over the counter PA periapical (radiograph) **PARL** periapical radiolucency **PCP** primary care physician

probing depth PD PDL periodontal ligament

PDMP Prescription Drug Monitoring Program picture exchange communication system PECS

PFM porcelain fused to metal PIP pressure-indicating paste POE periodic oral evaluation **PPS** posterior palatal seal

prophy prophylaxis

PRR preventive resin restoration

Pt patient Pt's patient's patients Pts Pts' patients'

PT prothrombin time

PTSD post-traumatic stress disorder

PVS polyvinyl siloxane

quartz-tungsten-halogen OTH RArheumatoid arthritis **RCT** root canal treatment

RIND reversible ischemic neurologic deficit

resin-modified glass ionomer RMGI RPD removable partial denture revolutions per minute rpm

RXprescription

SADE sensory-adapted dental environments

xxviii List of Abbreviations

SDF silver diamine fluoride

SLOB same lingual opposite buccal (rule)

SM space maintainer

SRP scaling and root planing

SSRI selective serotonin reuptake inhibitor

TB tuberculosis

TIA transient ischemic attack

TMD temporomandibular joint disorder

TMJ temporomandibular joint

USS ultrasonic scaler

VDO vertical dimension of occlusion

VDR vertical dimension at rest

VPS vinyl polysiloxane

vs. versus

WBC white blood cell (count)
WHO World Health Organization

WL working length

WNL within normal limits

WOR wax occlusal rims

WW wrought wire