

Dentist's Guide to Medical Conditions, Medications, and Complications

Dentist's Guide to Medical Conditions, Medications, and Complications

Second Edition

Kanchan M. Ganda, M.D.

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Dedication

This book is dedicated to all my students, past and present; to my late parents, Amrit Devi and Roop Krishan Dewan; and to my family, for all their encouragement and loving support.

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Kanchan Ganda, M.D.

Introduction: Integration of Medicine in Dentistry

Dental care today holds many challenges for the dental practitioner. Patients are living longer, often retaining their own dentition, have one or more medical conditions, and routinely take several medications.

Along with excellence in dentistry, the practicing dentist has the dual task of staying updated with the current concepts of medicine and pharmacology. They should rightfully be called the “Physician of the Oral Cavity.”

The integration of medicine in the dental curriculum has become a necessity, and this integration must begin with the freshman class, so the students can gain maximum benefit and the chance to gain credibility. The integration of medicine is best achieved when done in a case-based or problem-based format and correlated with the basic sciences, pharmacology, general pathology, oral pathology, and dentistry. There needs to be a true commitment and *constant* reinforcement of the integration in *all* the didactic and clinical courses.

The integration of medicine, pharmacology, and medically complex patient care is best achieved when done in a pyramidal process, through the four years of dental education.

The foundation should instill a basic knowledge of:

1. Standard and medically complex patient history-taking and physical examination.
2. Symptoms and signs of highest-priority illnesses, along with the common laboratory tests evaluating those disease states.
3. Anesthetics, analgesics, antibiotics, antivirals, and antifungals used in dentistry.
4. Prescription writing.

“Normal” patient assessment, when stressed in the first year, prepares students to better understand the changes prompted by disease states during the second year of their education, when didactic and clinical knowledge of highest-priority illnesses, associated diagnostic laboratory tests, and the vast pharmacopeia used for the care of those diseases is included. Case-based scenarios should be used to solidify this information.

The progressive learning up to the end of the second year prepares the student to “care” for the patient “on paper.” With the start of the clinical years, the student is prepared to apply this knowledge toward “actual” patient care, which occurs typically during the third and fourth years of education.

During the third year, the student should participate in medical and surgical clinical rotations in a hospitalized setting and complete a Hospital Clerkship Program where the student is exposed to head-and-neck cancer care, emergency medicine, critical care, anesthesia, hematology, oncology, transplants, cardiothoracic surgery, and so on. This exposure will widen the student's knowledge, broaden clinical perception, and further enhance the link between medicine and dentistry.

During the clinical years, the students should complete faculty-reviewed medical consults for *all* their medically compromised patients, *prior* to dentistry. This patient-by-patient health status review will help correctly translate their didactic patient-care knowledge in the clinical setting.

The text is a compilation of materials needed for the integration of medicine in dentistry. It is a book all dental students *and* dental practitioners will appreciate both as a read and chair-side.

This text provides information on epidemiology, physiology, pathophysiology, laboratory tests evaluation, associated pharmacology, dental alerts, and suggested deviations in the use of anesthetics, analgesics, antibiotics, antivirals, and antifungals for each disease state discussed.

The student will greatly benefit from the sections detailing history-taking and physical examination; highly expanded clinical and applied pharmacology of dental anesthetics, analgesics, antibiotics, antivirals, and antifungals; stress management; and management of medical emergencies in the dental setting.