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Review of: Essentials of Oral Histology and Embryology: A Clinical Approach

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Reviewed by Ruth Fearing Tornwall, RDH, MS, Instructor IV at Lamar Institute of Technology in Beaumont, Tex.

Essentials of Oral Histology and Embryology: A Clinical Approach

Third edition

James K. Avery and Daniel J. Chiego, Jr

Mosby, 2005

St. Louis, Mo

256 pages, color illustrations, indexed, softcover

ISBN: 0-323-03339-3

\$57.95

This is the third edition of *Essentials of Oral Histology and Embryology: A Clinical Approach* and is designed as a basic information text to help in the comprehension of the microscopic anatomy of the oral and facial tissues. The central purpose of this text is to educate students in the dental and dental hygiene professions with an explanation of the structures related to the masticatory apparatus. This new edition includes an additional author who had worked on revisions of previous texts and had made numerous contributions to the content in his area of expertise.

The area of head and neck embryology and histology is of extreme importance in the study of dental practice and dental hygiene. The authors feel that understanding histology is the first step in making the best treatment decisions for the patient. They state that "one must first understand what is normal in order to gain a better awareness of what is abnormal." This sets the tone of the text.

There are 16 chapters in this text. The authors begin in Chapter 1 with the development and structure of cells and tissues. Chapter 2 discusses the structure and function of cells, tissues, and organs, and how they function in making up organs and organ systems. This chapter has been specifically modified in this edition to provide more critical information about the building blocks of the body's systems. Chapters 3 through 5 cover the development of the oral-facial region, the face and palate, and the teeth. Chapter 6 discusses the eruption and shedding of the teeth. The enamel, dentin, dental pulp and cementum are discussed in depth in chapters 7 through 9. The next 2 chapters discuss the periodontium. Chapters 13 through 16 describe the temporomandibular joint, its anatomy, histology, and function, the oral mucosa and its components, the salivary glands and tonsils, and biofilms and their development in the oral cavity, respectively. Each chapter area is thoroughly discussed but is not overwhelming in its detail, making it also of practical value to dental hygienists who wish to review this information.

There are a number of features in each chapter which help student learning. Each chapter begins with learning objectives and key terms. Learning objectives identify the main ideas discussed in each chapter and what the student can be expected to know by reading its contents. It also helps students and instructors to set goals for comprehension and provide for a more directed learning at the outset of the chapter. Key terms are listed alphabetically and are then bolded in the chapter where they are discussed. At the end of the text, is a glossary providing definitions that will enable students to use the terms competently in their clinical vocabulary.

Throughout the chapters are special features, which include "clinical comment" boxes and "consider the patient" boxes. Clinical comment boxes provide clinical tips and notes of interest pertaining to the chapter content. Consider the patient boxes show the application of the chapter concepts by presenting the student with situations and patient questions that could occur in clinical practice. Each patient box has a corresponding discussion box at the end of the chapter providing answers to the questions or possible recommendations and explanations showing the student how they might respond to similar situations in clinical practice. They also help to set the stage for further discussion. Other features to help the student to understand chapter content include self-evaluation questions at the end of each chapter and tables and boxes throughout the text, which quickly summarize important information. The text is also supported by an Evolve Web site that accompanies and enhances the texts' material.

The text is very clear and easy to understand. Photographs, diagrams, illustrations, and drawings complement the text. The authors have positioned these features as close as possible to their associated content descriptions. Most illustrations are presented in color to enable students to better correlate the structure with its function by observing histology as they would view it in reality. The drawings and diagrams are of exceptional quality and contribute highly to the success of the text.

The third edition of *Essentials of Oral Histology and Embryology: A Clinical Approach* is very successful in its presentation and would be a valuable asset to any dental professionals. I highly recommend this text.

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Review of: Practice Management for the Dental Team

Anne Gwozdek, RDH, BA

Reviewed by Anne Gwozdek, RDH, BA, adjunct faculty member, University of Michigan, Ann Arbor, Mich. and Lansing Community College, Lansing, Mich.

Practice Management for the Dental Team

Sixth Edition

Finkbeiner BL and Finkbeiner, CA

Mosby, 2006

St. Louis, Mo.

558 pages, illustrated, indexed

ISBN: 0-323-00886-0

\$59.95

Practice Management for the Dental Team details instructions for performing front office skills. Noting at the beginning of the text that knowledge and best practices in this field are constantly changing, the authors have provided current, comprehensive information reflecting dental practice business office protocols, technologies, and federal regulations.

Spiral bound and paperback, this text is divided into 5 parts: Dentistry as a Business, Communication Management, Business Office Systems, and the Dental Assistant in the Workplace. Each of the 18 chapters includes a list of learning outcomes and boxes highlighting important information and specialized terms. Photographs and figures are in color and compliment the written body of material. Learning activities summarize chapters and provide practical application to concepts presented.

Case studies are included within each chapter assisting students in applying knowledge to realistic situations. Also included with the textbook is a Patterson Eagle Soft Demonstration CD, providing the reader with basic experience using practice management software. CD icons provide the reader with identified areas to utilize this interactive software. Student resources are available on an Evolve Elsevier Web site which includes crossword puzzles, weblinks, and working forms coinciding with each chapter.

All members of the dental team should be knowledgeable of and participate in the business aspect of the dental practice. Practice management, however, does encompass a broader premise than the operations of the business office. Incorporation of material related to staff meetings/morning huddles, the business model of overhead, salaries, and provider percentage of production (eg, hygiene production percentage related to dentist production) would be valuable content. Dental hygiene-specific topics such as individualizing patient recall appointment scheduling, assisted verses traditional patient care, and compensation models (salary, hourly, or commission) would serve to enhance the "dental team" focus indicated in the title.

The authors successfully integrated the latest concepts in instructional design with state-of-the-art business management content. *Practice Management for the Dental Team* is not only a valuable textbook but serves as a beneficial resource for any dental practice.

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Review of: Diet and Nutrition Sourcebook

Mary Danusis Cooper, RDH, MSED

Reviewed by Mary Danusis Cooper, RDH, MSED, professor, Dental Hygiene Program, Indiana University-Purdue University Fort Wayne, Ind.

Diet and Nutrition Sourcebook

Third edition

Edited by Joyce Brennfleck Shannon

Omnigraphics, 2006

Detroit, Mich.

634 pages, indexed, hardcover

ISBN: 0-7808-0800-2

\$78.00

Almost two-thirds of Americans are overweight or obese, increasing the onset of several conditions such as diabetes, stroke, osteoporosis, certain cancers, and heart disease. One of the challenges Americans face with nutrition is avoiding the availability of pre-packaged foods and fast-food restaurants. In our fast-paced lives, it is often more convenient to consume such products, which tend to be high in fat, sugar, and calories. Most Americans eat enough food, but not foods that the body needs to remain healthy. Increasing physical activity and eating right by incorporating proper nutrition can be challenging to most and, seeking such knowledge, can be overwhelming. One only needs to visit the health section in the library or bookstore to understand the multiple resources available to the consumer. Most consumers want to find that perfect resource that is easy to follow and understand. *Diet and Nutrition Sourcebook* provides that foundation.

This comprehensive, hardback text offers 70 easy-to-read chapters that are divided into 9 parts. The consumer's interest in nutrition will determine which part(s) to read. If the reader has an interest in how to provide healthy eating habits for children, then Part III-Life Stage Nutrition Issues, should be examined.

Part I of the text provides information on the latest *Dietary Guidelines for Americans 2005* and MyPyramid. Both provide guidelines for making good food choices. There are also individual chapters on essential nutrients and understanding the importance of these nutrients. Readers are also cautioned about misinformation about nutrition and nutrition myths.

In Part II, the reader can learn about the difference between servings and portions. It is interesting to note that portion sizes have increased in the past few years. We are eating much larger portions than ever before, thus providing additional, unnecessary calories and fat. This may be surprising to most readers.

In Part III, information is presented on age- and gender-related nutrition concerns, such as pregnancy, menopause, and aging.

Part IV addresses how to eat healthy when eating alone, at a restaurant, or with a family. It also addresses concerns between physical activity and the nutrition needs of the body.

Part V addresses weight control—a topic in which most are interested. What specifies a safe weight-loss program? Why is obesity of concern? What conditions are associated with obesity?

Part VI offers information on supplements and vitamins. Consumers need to be aware of the safety and possible adverse health risks of supplements.

Part VII provides guidelines for individuals who have chronic diseases and disorders, including diabetes and cancer. Diet is important in the treatment of diseases and conditions.

Part VIII provides valuable information on government food programs such as WIC and the federal food stamp program. It also addresses nutrition programs available for senior adults.

Besides the information provided in each section listed above, there are some outstanding resources chapters listed in Part IX. One is the Directory of Nutrition Information Sources chapter. It contains contact information of government agencies and organizations. The chapter on Nutrition Resource List of Consumers offers a list of cookbooks, newsletters, and magazines, as well as general nutrition books. For those who like to surf the internet, there is a chapter, *Finding Useful Nutrition Information Online*, which directs patients on how to do so as well as a list of online information. Another valuable chapter is the glossary of Nutrition and Dietary Terms.

This textbook is a valuable resource tool for any individual. Oral health care providers know that a healthy body begins with the mouth. It is our responsibility to educate our patients on how to prevent disease. Sometimes, just knowing where to refer our patients for additional information can help them in making lifetime changes that will be essential for their overall health.

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Review of: Dental Drug Reference with Clinical Implications

Ann Eshenaur Spolarich, RDH, PhD

Reviewed by Ann Eshenaur Spolarich, RDH, PhD, Arizona School of Dentistry and Oral Health; Arizona School of Health Sciences; USC School of Dentistry; University of Maryland Dental School

Dental Drug Reference with Clinical Implications

Frieda Atherton Pickett, RDH, MS, and Géza T. Terézhalmy, DDS, MA

Lippincott Williams & Wilkens, 2006

Baltimore, Md

834 pages, illustrated, softcover, with CD-ROM

ISBN 0-781-77762-3

\$45.95

Dental Drug Reference with Clinical Implications is a chair-side reference text for use by dental professionals in clinical practice. The book and its CD-ROM contain a wealth of information related to the use of drugs in dentistry and the management of patients taking medications. Although the authors state that the content of the book focuses on commonly prescribed medications, and thus, not all available medications are included, this text contains over 3500 drug monographs, and as such, is fairly comprehensive in its scope. The book is highly relevant to practicing dental professionals, easy to use, and affordable.

The layout of the book lends to its ease of use. Section 1 contains 7 chapters that review essential background information, almost like a "refresher" course on pharmacology and clinical medicine. These chapters provide information used to aid in diagnosis and treatment planning of medicated patients. Dental professionals will appreciate that they can obtain 2 continuing education credits for each of these 7 chapters upon the successful completion of self-study and examination through the Dental School at the University of Texas Health Science Center at San Antonio.

Chapter 1 presents the general principles of pharmacology, which is very well written and serves as an excellent review for both recent graduates and established practitioners alike. Chapter 2 focuses on adverse drug events, with detailed explanations as to the mechanisms of adverse drug reactions, including drug interactions, clinical manifestations, as well as tips for diagnosing these reactions, and guidelines for reporting adverse drug events. To supplement the detailed discussion of the chapter, a wide array of clinical photographs on the CD-Rom serve as a valuable resource for clinicians who may be unfamiliar with the numerous drug-related oral adverse effects. Faculty will be able to use these photographs for teaching these concepts to students.

Chapters 3 and 4 are found on the CD-ROM, with content devoted to the medical management of acute odontogenic pain and infections. Clinical images are provided to aid in diagnosis and sample prescriptions are included to assist with treatment. A detailed discussion of the safe and appropriate use of antibiotics is both timely and useful, especially the sections discussing both the need and rationale for antibiotic premedication for medically complex patients.

Chapter 5 reviews the management of 15 oral conditions, ranging from common oral problems such as xerostomia and candidiasis, to less commonly encountered conditions, such as pemphigus, osteitis, and burning mouth syndrome. Diagnostic criteria and decision-trees are especially helpful for clinicians, who will also appreciate the sample prescriptions listed under the management and treatment sections for each of these conditions.

Chapter 6 provides a comprehensive review of clinical medicine, and focuses on common medical conditions that are treated with medications. Again, the format of this chapter lends itself well as a resource in clinical practice. Each topic is presented with the same structured content for consideration: medical history considerations, vital signs, treatment strategies, preventive strategies, and potential medical emergencies. Drugs used to manage these common conditions are highlighted in boxes throughout the text with bulleted key points that focus the reader's attention to the most relevant information. This format is a time saving tool that will allow clinicians to easily access the most important information quickly, which is the very hallmark of a chair-side resource.

Chapter 7 reviews the diagnosis and interventions necessary for medical emergencies that occur in the dental care setting. Again, this chapter follows a specified format: predisposing factors, prevention, signs and symptoms, and treatment. The bulleted, concise text makes it simple to find the most relevant information quickly. Especially noteworthy in this chapter is the discussion about the importance of being prepared for a medical emergency, with specific strategies that all dental professionals can use to improve their own skills, to reduce risk, and to ensure the proper and efficient management of an emergency situation.

Each of these 7 chapters contains a list of references to support the content presented in the text. The references are current, and where applicable, are organized by subject heading. Not surprisingly, many references are original publications by Géza T. Terézhalmy, which is a testimonial to the author's expertise in this subject area.

Section 2 contains the alphabetical listing of drug monographs, with a format found in other similar drug reference texts. Drugs that are prescribed in dentistry are identified by a tooth symbol preceding the drug name. Drugs are listed alphabetically by generic name, followed by brand names, classification, and where appropriate, information as to whether the drug is a controlled substance. Each monograph reviews pertinent pharmacology, including a brief discussion of the mechanism of action, indications/contraindications, and pharmacokinetics. Dental professionals will most likely refer to the sections on drug interactions relevant to dentistry and adverse effects. Oral adverse effects are highlighted at the beginning of this section. Dental hygienists will especially like the section on oral health education, which details specific information that should be taught to patients who are taking a particular medication.

Finally, the appendices offer many useful tables, including drug lists arranged by condition (eg, drugs for migraine headache), dental products, and common abbreviations. There is also a nice review of herbal supplements, drug-herb interactions, and related dental implications. A list of references to support the information on herbals is included with the discussion. A new and beneficial appendix that is unique to this text is a table that translates commonly asked questions in English to Spanish, a valuable tool for use during a comprehensive health history review. An appendix that lists normal values for common laboratory tests is found on the CD-ROM.

In summary, the authors are to be commended on writing such a useful clinical pharmacology resource text for students, faculty, and clinicians. It is very well written and its format supports its use in clinical practice. Dental hygienists should consider adding this resource to their personal libraries to improve their care and management of medicated patients.

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Review of: Behavioral Dentistry

Lisa Shaw, RDH, MS

Reviewed by Lisa Shaw, RDH, MS, residential health care coordinator at Faxton-St. Luke's Healthcare, James M. Rozanski General Practice Residency Program, Utica, NY.

Behavioral Dentistry

D. I. Mostofsky, A.G. Forgione, and D.B. Giddon

Blackwell Publishing Professional, 2006

Ames, Iowa

320 pages, illustrated, indexed, softcover

ISBN: 0-813-81213-7

\$79.99

Behavioral medicine and health psychology are 2 disciplines that focus on the use of psychological theory, principals, and techniques to impact health and illness, with the goal of reducing risk factors, promoting health behaviors, and providing workable interventions. Mostofsky, Forgione, and Giddon have brought together more than 30 experts to provide dental students and practitioners with a comprehensive text that explores psychological theory, principals, and techniques as they relate to dentistry. The text presents 21 chapters under 4 general headings: Biobehavioral Processes, Anxiety, Fear, and Pain, Changing Behaviors, and Professional Practice.

Within Biobehavioral Processes, Giddon and Anderson provide valuable insight into the importance of the mouth in interpersonal attraction, survival, socialization, and self-actualization. Understanding the subjective and objective information that both clinicians and patients bring to the dental relationship with regard to the craniofacial area can significantly impact treatment and outcomes. Inglehart expands on Giddon and Andersons concepts with her discussion of Oral-Health-Related Quality of Life (OHRQoL). She defines OHRQoL as the "part of a person's quality of life that is affected by the person's oral health." More specifically, it addresses how functional, psychological, and social factors, as well as how pain and discomfort, affect a persons overall well being and quality of life. Inglehart takes the guesswork out of assessing these factors by providing readers with an overview of 3 different assessment techniques and tools (social indicators, global self-rating, and multiple-item surveys). OHRQoL is an important concept as it attempts to shape and direct the efforts of researchers, clinicians, and educators towards truly workable patient-centered care. The Biobehavioral Processes heading concludes with chapters that address the bidirectional relationship between stress and inflammation, saliva in health and disease, biofeedback in the treatment of myofascial pain disorder and tempromandibular joint pain, and finally, hypnosis in dentistry.

The second heading, Anxiety, Fear, and Pain, provides chapters that primarily discuss the emotional and environmental determinants of dental pain, stress, and behavioral change. McNeil, Sorrell, and Vowles, in their chapter, Emotional and Environmental Determinants of Dental Pain, provide an excellent overview of how dental pain is affected on all levels by the emotions of fear, anxiety, and depression. In addition, they discuss how emotional processes such as catastrophizing,

an individual's sensitivity to and memory of pain, a patient's perception of predictability and control over the process, sociocultural factors, and environmental factors such as the dental setting and individual and dental staff attitudinal and communication issues impact dental pain.

Regarding behavioral change, Koerber, in her chapter, *Health Behavior and Helping Patients Change*, acknowledges that "increasing a patient's knowledge is often not enough to cause patients to make the necessary changes to maintain their own oral health." The goal of the chapter is to describe and discuss counseling skills that practitioners and students can use that will facilitate patients making better choices that will positively impact their oral and systemic health. In reviewing health behavior models, she concludes that knowledge, as stated, does not directly determine behavior. For knowledge to impact behavior, one must change individual attitudes and values, those changes must be strong enough to withstand surrounding cultural and social norms, and the individual must believe that they are capable of the behavior. She provides a brief overview of the popular Transtheoretical Model of Change by Prochaska & DiClemente, an overview of Rollnick's recommendation with regard to advice giving, a table that provides a contrast between statements that arouse resistance and those that do not, and finally, an overview and table that outline the principals of the process of motivational interviewing.

The third heading, *Changing Behaviors*, includes chapters on the Behavioral Management Of Thumb Sucking, the Management of Children's Disruptive Behavior, the Nonpharmacological Approaches to Managing Pain and Anxiety, Self-Efficacy Perception in Oral Health Behavior, and Behavioral Issues in Geriatric Dentistry. Allen, in his discussion of the management of children's disruptive behavior during dental treatments, notes that many studies have been unable to identify reliable predictors of disruptive behavior, and that the only "reliable, good predictor of disruptive behavior was [the] age of the child." He further concludes that dentists have no control over any outside factor that may be impacting behavior, and thus their focus should be on affecting variables within the dental environment that can impact change in a child's behavior. Finally, he offers 5 simple approaches that he believes over time have demonstrated the ability to provide a more pleasant experience for children. Those suggestions include:

1. The use of topical anesthesia and slow injections.
2. Allowing parents of young children to accompany them into the operatory and asking the parents to either be silent or limit their discussions to nonprocedural related topics.
3. Offer pleasing distractions, such as TV, DVDs, Music CDs, headsets, etc. In addition, the children should have control over these devices.
4. Simple and positive communication, focusing praise on observed cooperative behavior. Efforts should be made to have 3 to 4 times more positive comments than negative or controlling comments. In addition, threats or promises about either negative or positive consequences to come at the end of treatment should be kept at minimum, as children live in the moment.
5. Brief breaks should be offered frequently regardless of how the child behaves.

Additional chapters in the *Changing Behaviors* heading provide excellent overviews of the biological and cognitive perception of pain, fear, and anxiety, as well as how improving the dental patient's self-efficacy can ultimately improve oral health behaviors. Hittelman and Bahn provide excellent tables that include educational, pharmacological, behavioral/interpersonal, and biomechanical strategies for the management of pain experiences. In addition, they provide tables regarding pain factors affecting experience, approaches to pain control in treatment, pain threshold responses, and behavioral strategies to raise pain response thresholds.

Finally, the *Professional Practice* heading provides valuable information with regard to treating individuals with special needs and community efforts to impact the delivery of care, health behavior and the treatment of individuals with diabetes, effective communication training in dental education, and community health promotion. Overall this is an excellent working text that would be a welcome addition to any dental library. It is, as Mostofsky, Forgione, and Giddon note, "an entry [in]to the impressive literature on behavioral dentistry." It provides a wealth of information that will, if given time and practice, "offer practical solutions that can be implemented without burdensome cost or effort to both the dental team and the patient."