

Chapter 23: Book Reviews

There is a growing number of veterinary dental textbooks in print. Having read several of them, I thought I would share my impressions. There are more texts available than those listed here and many human dental textbooks offer applicable information as well. This should help you get started.

Handbook of Small Animal Dentistry;

by Emily and Penman is available from LifeLearn. This paperback, first published in 1990, has a second edition published in 1994. At 101 pages, with many three colour illustrations and black and white photographs, this is not an in-depth text. It is, however, very readable and a source of much valuable information. Chapters include Anatomy, Hand Instruments, Power Equipment, Radiographic Technique, Periodontal Disease and Treatment, Restorative Dentistry, Endodontics, Extraction and Oronasal Fistula Repair and Problems Peculiar to Continually Erupting Teeth.

After reading this book, you will not be ready to start doing root canal work, but you will have a better understanding of what is involved. This book would be a very good place to start.

Handbook of Oral Emergencies;

by Gorrel is also available from Life-Learn. This is quite a short book (52 pages). It contains many black and white photographs and three colour drawings as well as algorithms. The book's stated purpose is not to make the reader an oral surgeon, but to improve your awareness of the common oral emergencies, their significance and what to do about them until definitive treatment can be sought (usually by referral).

There are chapters on radiology, infectious conditions, soft tissue trauma, dental fractures and jaw fractures. Though this book will not teach you much physiology or advanced technique, it will help you avoid some of the common mistakes that can make a bad situation worse. For those with limited background and interest in dentistry, this book should be required reading.

Practitioner's Guide to Veterinary Dentistry;

by Shipp and Fahrenkrug (1992) is published by Dr. Shipp's Laboratories and can be ordered by

calling 800-442-0107. This is another introductory textbook with many black and white illustrations and some photographs. All the important subjects are discussed, but none in enough detail to make the reader proficient. There are several techniques outlined that I would never use personally. One asset this book has is a colour atlas at the back with 96 high quality photographs of oral and dental pathology and treatments. Another asset is a list of manufacturers and suppliers of dental equipment and materials. Unfortunately, this list gives only American addresses and phone numbers.

Interestingly, this book can be had for free if you place a significant order with Dr. Shipp's Laboratories. Dr. Shipp distributes a number of interesting and useful dental, surgical and client education products. You can get his catalogue by calling the number above.

Veterinary Dental Techniques Second Edition;

by Holmstrom, Frost and Eisner was published by Saunders in 1998. This book delivers what the title suggests. It is a cook-book approach that tells you what to do, but not why or what to do if what they suggest is not working for any reason. The author's preface actually states that the book was designed to supplement other dental texts (human and veterinary) that would cover anatomy, pathogenesis and theory. A useful quick reference covering all areas of veterinary dentistry, it also has a list of suppliers and manufacturers. A welcome addition to this second edition is a chapter on anesthesia and pain management. A book worth having, but it should not be the only dental text you have.

A third edition is due out in sometime in 2004.

Small Animal Dentistry;

by Harvey and Emily was published by Mosby Yearbook in 1993. At over 400 hundred pages with 116 full colour photographs of oral pathology, many clear black and white photographs and illustrations, this was, until recently, the best text by far. For many readers, it might still be the preferred text. There is a reasonable amount of information on anatomy, physiology and theory as well as technique. Yet it is not so detailed as to be overwhelming. If you are only going to have one veterinary dental text, this should likely be the one.

Veterinary Dentistry, Principles and Practice;

by Wiggs and Lobprise was published in 1997 by Lippincott-Raven. At over 700 pages, this is the largest text devoted to the subject to date. Twenty-one chapters cover everything from oral embryology and histology through to behavior problems with oral manifestations. There is plenty of theory and background detail for the serious student on veterinary dentistry (both authors are past chairs of the AVDC examination committee). There is an extensive glossary of terms, a list of dental abbreviations and a list of suppliers. There is a section on exotics, one on lagamorphs and rodents, one on large animals and more. The publisher's decision to go paperback was a disappointment to the authors but helped to keep the cost down. The only criticism I would have is that there were a few places where the addition of more illustrations would have been helpful. Overall, this is by far my favorite veterinary dental textbook and I feel it is a must for anyone serious about veterinary dentistry.

The Practice of Veterinary Dentistry:

By Jan Bellows was published by Iowa State Press in 1999. A large format, hardcover book with many good quality black and white photographs, this would be considered another introductory textbook. The chapter on Philosophy and Teamwork should be required reading for everyone involved in the delivery of dental care. With fewer than 200 pages, it is a quick read. The focus is more on how to design and delivery/market dental services but it is a bit light on the details. There are also a few treatment recommendations proposed that are currently considered quite controversial. In time, they may prove to be safe and effective but their inclusion in a textbook prior to proper scientific evaluation and long-term success in the field seemed inappropriate to me.

Atlas of Canine and Feline Dental Radiography;

by Mulligan, Aller and Williams was published by Veterinary Learning Systems in 1998. A soft cover book on medium quality paper, this is still an excellent resource for the beginner. The text is supplemented with hundreds of photographs, radiographs and line drawings. The book discusses equipment, materials, theory, technique, interpretation, trouble-shooting and

then goes on to chapters covering the radiography of the various dental disciplines (periodontics, endodontics, development, caries, trauma...). There is even a self-test at the back. This book shows how to position, expose, process, interpret and store dental radiographs. This is another book that should be required reading for anyone offering dental services.

An Atlas of Veterinary Dental Radiology;

by DeForge and Colmery plus many contributing authors, published by Iowa State Press in 2000. This is a large-format, hardcover book with glossy pages and good quality reproductions. This is much more an atlas than Mulligan's book. It has just under 300 pages and most of these pages are of radiographs with brief interpretations. There are a few pages on technique, but the main focus is on interpretation of a wide variety of dental radiographs. There are separate sections for canine, feline and zoo/rodent/rabbit patients as well as a section on film problems. While Mulligan's book does a good job of teaching the reader how and why to take dental radiographs, this one will really help the reader develop an eye for understanding the images.

Glossary

Abrasion	Wearing away of teeth due to abnormal contact with structures other than teeth.
Acquired Pellicle	The thin film composed mostly of protein that forms on the surface of the teeth. It forms with or without bacteria and can be removed by abrasion.
Alveolar Bone	Cancellous bone directly in contact with tooth roots.
Alveolar Crest	The ridge of bone between two adjacent teeth or between the roots of a multi-rooted tooth.
Alveolar Mucosa	The less densely keratinized tissue covering the bone, found apical to the gingiva.
Alveolus	The socket in the jaw that surrounds and supports the tooth.
Anodontia	The absence of teeth.
Anterior Teeth	Canines and incisors.
Apex	The terminal portion of the root.
Apical	Towards the apex.
Apical Delta	The group of tiny canals in the apex of the root through which the pulp nerves and vessels enter the tooth.
Attached Gingiva	The gingiva from the free gingival groove to the mucogingival line.
Attachment Apparatus	The periodontal ligament, cementum and alveolar bone.
Attrition	The wearing away of teeth by tooth to tooth contact.
Avulsion.	The separation of tooth from alveolus.
Buccal	For posterior teeth, the surface nearest the cheek.
Calculus	Hard, mineralized plaque on the teeth.
Canine Tooth	The large single rooted tooth designed for grasping and tearing.
Caries	A demineralization and loss of tooth structure due to the action of microorganisms on carbohydrates.
Carnassial Tooth	The upper fourth premolars and lower first molars, designed for shearing.
Cementoenamel Junction	The neck of the tooth where the enamel of the crown meets the cementum of the root.
Cementum	A layer of bony tissue covering the dentin of the root and in which the periodontal ligament is embedded.
Coronal	Towards the crown.
Crown	Portion of the tooth covered by enamel.
Cusp	Tip or pointed prominence of a crown.
Deciduous Teeth	'Baby teeth' or primary dentition.
Dental Arch	Formed by the curve of the crowns of the teeth in their normal positions.
Dental Quadrant	Half of an arch when divided at the mid-line.
Dentin	The main component of teeth. It consists of multiple tubules that extend from the pulp to its outer surface. The tubules contain sensory nerve fibers. It is harder than bone. It is covered by cementum in the root and enamel in the crown.

Diastema	The space between two adjacent teeth that are not in contact with each other in the arch.
Distal	Away from the mid-line of the dental arches.
Enamel	The hard, shiny outer layer covering the crown, composed of hydroxyapatite crystalline components.
Epithelial Attachment	Tissue attaching the gingiva to the tooth.
Erosion	Loss of tooth structure by chemical means not involving bacteria.
Facet	A flatted or worn spot on the surface of a tooth.
Free Gingiva.	Portion of the gingiva not directly attached to the tooth and which makes up the gingival wall of the sulcus.
Free Gingival Groove	A slight concavity on the surface of the gingiva separating free and attached gingiva.
Free Gingival Margin	The free edge of the gingiva on the tooth.
Freeway Space	The space between the opposing mandibular and maxillary teeth when the mouth is closed.
Furcation	The space between two roots where they join the crown.
Gingiva	Soft tissue surrounding the teeth.
Gingival Hyperplasia	A pathological increase in the amount of gingival tissue.
Gingival Sulcus	The normal space between the free gingiva and the tooth. In dogs it should be 2 to 3 mm deep and in cats 0.5 to 1 mm deep.
Horizontal Bone Loss	Loss of alveolar crestal bone along an arch secondary to periodontal disease.
Incisal	Biting surface of anterior teeth.
Incisor	The small anterior teeth.
Infrabony pocket	A periodontal pocket within the alveolar bone.
Interdental	The area between the proximal surfaces of adjacent teeth in the same arch.
Inter-proximal	Between adjacent teeth in the same arch.
Inter-radicular	Between roots of a multirooted tooth.
Labial	For anterior teeth, the surface nearest the lips.
Lamina Dura	The dense cortical bone forming the wall of the alveolus next to the tooth.
Line Angle	Imaginary line where two faces of a tooth meet.
Lingual	For mandibular teeth, the surface nearest the tongue.
Mandible	The bone of the lower jaw.
Maxilla	The bone forming most of the upper jaw.
Mental Foramen	Openings in the mandible through which nerves and vessels emerge.
Mesial	Towards the mid-line of the dental arch.
Molar	Large, multi-cusped teeth designed for grinding.
Mucogingival Line	Line of demarcation where gingiva meets alveolar mucosa.
Neck	Cemento-enamel junction.
Occlusal	The chewing surface of posterior teeth.

Odontoblast	Cell in the pulp which produces dentin.
Oronasal Fistula	An abnormal opening between oral and nasal cavities.
Palatal	For maxillary teeth, the surface nearest the palate.
Palate	Structure separating oral and nasal cavities.
Periapical Abscess	An abscess at the apex involving the pulp and surrounding apical tissue.
Periodontal Abscess	An abscess involving the periodontium.
Periodontal Ligament	A network of fibers connecting tooth to bone.
Periodontal Pocket	A pathological increase in the depth of the sulcus with loss of epithelial and periodontal ligament attachment.
Periodontium	The supporting structures of the teeth including the periodontal ligament, gingiva, cementum, alveolar and supporting bone.
Plaque	An invisible film covering the teeth composed of bacteria, saliva, food particles, and sloughed epithelial cells.
Posterior Teeth	Premolars and molars.
Premolar	Teeth between canines and molars, designed for shearing.
Primary Teeth	The first teeth to erupt and which are replaced by adult teeth.
Proximal	The surface of a tooth adjacent to another tooth.
Pulp	The soft tissue inside a tooth composed of blood vessels, nerves, lymphatics and connective tissue.
Pulp Chamber	Portion of the crown containing pulp.
Pulpitis	Inflammation of the pulp.
Pyorrhea	A discharge of pus from the periodontium.
Radicular	Pertaining to the roots.
Resorbtion	Loss of substance by a physiological or pathological process.
Root	Portion of the tooth normally covered by cementum.
Root Canal	Portion of the root containing pulp.
Root Fenestration	A window like opening of bone \pm gingiva over the root.
Ruga Palatina	Irregular ridges in the mucous membrane covering the anterior hard palate.
Stomatitis	Inflammation of the soft tissues of the mouth.
Sublingual	Below the tongue.
Vertical Bone Loss	Bone loss at an acute angle to the root surface forming an infraboney pocket.

Suppliers

This section contains a partial list of dental manufacturers and suppliers. Inclusion in this list does not imply an endorsement by the author. Exclusion from the list is an oversight on my part.

Alrich Girard Corp	3627 N. Andrew's Avenue Oakland Park, FL 33309 305-561-8597 800-654-5705	Power equipment
Anderson Dental Services	2054 Running Bridge Ct. Maryland Heights, MO 63043 314-878-8480	Radiographic processing equipment and accessories
Ash Temple	221 Jacob Keffer Parkway Concord, Ontario, L4K-5T9 800-268-6497	Full line of human and veterinary dental supplies
Brassler Canada	575 Decelles, Suite 234 Montreal, PQ., H3S-2C3 800-363-3838	Dental burs and hand instruments
Buffalo Dental Manufacturing	575 Underhill Blvd. Syosset, NY 11791 800-828-0203	Dental hand pieces.
Borderlink Veterinary Supplies	122 Saunders Road, Suite #3 Barrie, Ontario, L4N-9A8 888-531-1511	Power and hand instruments and sharpening machine.
Caulk/Dentsply	Lakeview and Clark Avenues Milford, DE 19963 302-422-4511 800-532-2855	Dental burs, endodontic files and more.
C.D.M.V. Inc.	C.P. 608.2999 Choquette St. Hyacinthe, Quebec J2S-6H3 514-773-6073 800-668-2368	Complete line of veterinary dental supplies.
Cislak Manufacturing Inc.	5768 W. 77th Street Burbank IL 60459 708-458-6163	Wide range of dental and surgical instruments
Dentalaire	1820 S. Grande Ave., Suite D Santa Ana, CA 92705 800-866-6881	Compressors, air-powered stations, hand piece repair
Eastman-Kodak Co.	Health Sciences Division Rochester, NY 14650 800-242-2424	Radiographic film and accessories.
Ellman Dental Manufacturing Co.	1135 Railroad Avenue Hewlett, NY 11557 516-569-1482 800-835-5355	Electrosurgical units, burs, sundries.
Engler Engineering Corp.	1099 E. 47th Street Hialeah, FL 33013 305-688-8581 800-445-8581	Scalers, polishers, endodontic instruments.

Gingi-Pak	P. O. Box 240 Camarillo, CA 93011 800-437-1514	Retraction cord and placement instruments.
Henry Schein, Inc.	5 Harbor Park Drive Port Washington, NY 11050 800-223-3300	Full line of human and veterinary dental supplies.
Hu-Friedy Co.	3232 N. Rockwell Street Chicago, IL 60618 312-975-6100	Hand instruments. Distributed by Ash Temple
Jorgensen Laboratories	1450 N. VanBuren Loveland, CO 80538 303-669-2500	Hand instruments and mouth gags.
Kerr/Sybron	P. O. Box 455 Romulus, MI 48174 313-946-7800 800-521-2854	Dental burs, endodontic instruments and files, restorative materials and instruments.
3M (Canada) Dental Products	Box 5757 London, Ontario, N6A-4T1 800-265-9053	Restorative materials and abrasives.
Metadentia	39-23 62nd Street Woodside, NY 11377 718-672-4670 800-221-0750	Endodontic instruments, hand pieces.
Miltex Instruments Co., Inc.	6 Ohio Drive Lake Success, NY 11042 516-775-7100 800-645-8000	Hand instruments and burs.
Minxray	3611 Commercial Avenue Northbrook IL 60062 708-564-0323 800-221-2245	Portable radiographic equipment and accessories.
Premier Dental (Canada) Inc. ESPE-Permier (Canada) Inc.	480 Hood Road, Unit #3 Markham, Ontario, L3R-9Z3 905-513-7990	Restoratives, burs, hand instruments, surgical instruments.
Sage-London Industries, (a division of Henry Schein/Arcona)	17 Keefer Road St. Catharines, Ontario, L2M-6K4 800-461-9383	Dental power and hand instruments as well as other veterinary supplies.
Shor-Line, Schroer Manufacturing Co.	2221 Campbell Street Kansas City, MO 64108 816-471-0488 800-444-1579	Scalers, air-powered stations, tables.
Star Dental Products	1816 Colonial Village Lane Lancaster, PA 17601 717-291-1161 800-422-7827	High speed, low speed hand pieces, sonic scalers.