

# **Table of contents**

Contributors xii

Foreword by *Judy Ozier* xiii

Foreword from Academy of Veterinary Dental Technicians xv

Preface xvi

Acknowledgments xvii

## **1: The Basics 1**

*Gerianne Holzman*

Anatomy of the Skull 2

Odontogenesis 10

Anatomy of the Tooth 13

Directional Terminology 16

Training, Key Terms, and Videos (Dental anatomy, Directional terminology, Tooth numbering): Online only

## **2: The Examination Room and the Dental Patient 21**

*Mary Berg*

Introduction 22

The Client Interview 22

The Oral Examination: Conscious Patient 23

Communicating with Clients 25

The Dental Estimate (Treatment Plan) 26

Training and Key Terms: Online only

## **3: Components of the Dental Operator 29**

*Benita Altier*

Components of the Dental Operator: The Big Picture 30

Operatory Functionality 30

Dental Delivery Units 31

Dental Handpieces 36

Summary of Power Equipment 41

Dental Tables and Chairs 41

Organizing the Dental Operatory 44

Personal Protection 44

Ergonomics 47

Training, Key Terms, and Supplemental Figures: Online only

#### **4: Anesthesia and the Dental Patient 51**

*Annie Mills*

Introduction 52

Anesthesia for the Dental Patient 52

Anesthetic Equipment 53

Monitoring Anesthesia and Common Complications 56

Pain Management in the Dental Patient 60

Training, Key Terms, Video (Operatory final), and Document (Anesthesia cheat sheet): Online only

#### **5: The Dental Cleaning 65**

*Julie McMahon*

Introduction 66

Common Instrumentation for the Dental Cleaning 67

The Dental Record 69

The Dental Cleaning Procedure 73

Cleaning the Teeth Using the Power Scaler 81

Dental Cleaning with Hand Instrumentation 82

Polishing 84

Recovery 86

Home Care 86

Equipment and Instrument Care 89

Training, Key Terms, Supplemental Figures, Videos (Basics of the dental cleaning), Presentation (Skillbuilder for basics of the dental cleaning), and Documents (Brushing the teeth and Developing a home dental health care plan): Online only

## **6: Dental Radiology 93**

*Laurel Bird*

Radiography in Veterinary Dentistry 94

The Dental X-Ray Unit 94

Dental Radiographic Image Media and Capture 97

Positioning for Taking Dental Radiographs 107

Care and Storage of Images 123

Anatomy on the Dental Radiograph 124

Troubleshooting 127

Advanced Imaging 129

Training, Key Terms, and Video (Dental radiograph positioning): Online only

## **7: Common Dental Conditions and Treatments 131**

*Jeanne R. Perrone, Sara Sharp, and Patricia A. March*

Introduction 132

### **Periodontal Disease 132**

*Jeanne R. Perrone*

What is Periodontal Disease? 132

Pathogenesis of Periodontal Disease 132

Clinical Signs 134

Radiographic Signs 134

Treatment and Therapies 137

In Conclusion 141

Training, Key Terms, Supplemental Figures, Presentations (Stages of periodontal disease, Flap procedures, Dental extractions, Oronasal fistula), and Videos (Periodontal hand instrumentation, Extraction instrumentation): Online only

### **Endodontic Disease 141**

*Sara Sharp*

Anatomy of the Pulp 141

Indications for Endodontic Therapy Due to Trauma 142

The Endodontic Exam 142

The Endodontic Treatment 143

In Conclusion 149

Training, Key Terms, and Supplemental Figures: Online only

### **Malocclusion 150**

*Patricia A. March*

Normal Occlusion 150

Types and Treatments of Malocclusions 151

Position Statements 153

Treatment of Malocclusions 153

In Conclusion 156

Training, Key Terms, and Supplemental Figures: Online only

## **Jaw Fracture Management 156**

*Patricia A. March*

Types of Jaw Fractures and Their Treatment 156

Diagnosis of Jaw Fractures 157

Jaw Fracture Management 157

Jaw Fracture Repair 158

Home Care 160

Training, Key Terms, Supplemental Figures and Presentation (Tape muzzle):  
Online only

## **Oral Tumors 160**

*Patricia A. March*

Benign Oral Tumors and Treatments 162

Malignant Oral Tumors and Treatments 164

Charting and Preparation of Samples 166

Training, Key Terms, and Supplemental Figures: Online only

## **8: Feline Dentistry 169**

*Jennifer Crawford and Billie Jean (Jeannie) Losey*

Introduction 170

## **Gingivostomatitis 170**

*Jennifer Crawford*

Symptoms of Gingivostomatitis 171

Diagnostics 173

Oral Evaluation 173

Treatments 174

Aftercare 176

Summary 177

Key Terms and Supplemental Figures: Online only

**Eosinophilic Granuloma Complex 177**

*Billie Jean (Jeannie) Losey*

Causes 178

Symptoms 178

Diagnostics 178

Treatments 179

Key Terms and Video (Eosinophilic granuloma complex): Online only

**Feline Tooth Resorption 180**

*Billie Jean (Jeannie) Losey*

Definition and Symptoms 180

Stages of Tooth Resorption 182

Diagnostics 184

Charting 185

Treatment 185

Key Terms, Training, Supplemental Figures, and Video (Tooth resorption):  
Online only

**9: Dentistry and the Exotic Patient 187**

*Kathy Istace*

Challenges of Exotic Dentistry 188

**Rodent Dentistry 188**

Caviomorph Rodents (Guinea Pigs, Chinchillas, Degus) 188

Murine Rodents (Rats, Mice, Hamsters, Gerbils) 188

Oral Examination of Rodents 191

Anesthesia and Pain Management 191

Common Dental Problems of Rodents 193

Dental Instruments 195

Husbandry and Home Care 195

Supplemental Figures and Video (Pocket pet dentistry for the veterinary technician): Online only

### **Miscellaneous Small Pets 196**

Hedgehogs 196

Sugar Gliders 196

### **Rabbit Dentistry 196**

Oral Anatomy and Dentition of Rabbits 197

Oral Examination of Rabbits 197

Anesthesia and Pain Management 198

Common Dental Problems of Rabbits 201

Dental Instruments 203

Husbandry and Home Care 203

Supplemental Figures: Online only

### **Ferret Dentistry 204**

Oral Anatomy and Dentition of Ferrets 204

Common Dental Problems of Ferrets 206

Dental Instruments 207

Husbandry and Home Care 207

Supplemental Figures: Online only

### **Dental Radiography for the Exotic Patient 208**

Materials and Equipment 208

Rodents and Rabbits 208

Ferrets 211

Supplemental Figures: Online only

Training, Key Terms, and Documents (Dental assessment charts for rabbit, guinea pig, chinchilla, rat, mouse, hamster, and ferret): Online only

## **10: Discharging the Dental Patient 213**

*Patricia Dominguez*

Discharge Instructions: What You Need 214

The Importance of Photographs and Radiographs 218

Managing Recheck Visits 220

Reminders: How Often Should Dental Patients Return? 221

Training, Key Terms, and Supplemental Figure: Online only

## **Appendices 223**

1. Home Oral Health Care Interview Form 223

2. Canine Dental Chart 225

3. Feline Dental Chart 227

4. Dental Procedure Estimate 229

5. Dental Procedure Release Form 230

6. Dental Radiograph Template 231

7. Discharge Take Home Instructions Example 233

8. Discharge Take Home Pictures: Simple Example 235

9. Discharge Take Home Pictures: Detailed Example 236

Index 245