

Contents

Preface xi

Section I Behavior and Capture Techniques 1

1 Behavior and Capture Techniques 3 *David E. Anderson*

Section II Physical Restraint and Injection Sites 9

2 Haltering 11 *Meredyth L. Jones*

3 Manual Restraint 14 *David E. Anderson*

4 Chute Restraint 21 *Meredyth L. Jones*

5 Ear Squeeze (Ear Twitch) 24 *Meredyth L. Jones*

6 Injections—Subcutaneous (SC), Intramuscular (IM), Intradermal (ID), Intravenous (IV) 26 *Meredyth L. Jones*

Section III Chemical Restraint and Anesthesia 31

7 Sedation and Tranquilization 33 *David E. Anderson*

8 Injectable Anesthesia 37 *David E. Anderson*

9 Orotracheal Intubation 41 *David E. Anderson*

10 Nasotracheal Intubation 45

David E. Anderson

11 Percutaneous Tracheal Intubation (Also Referred to as Retrograde Tracheal Intubation) 48

Matt D. Miesner

Section IV Catheterization 53

12 Vascular Catheterization—Jugular Vein 55

Meredyth L. Jones

13 Vascular Catheterization—Cephalic Vein 61

Meredyth L. Jones

14 Vascular Catheterization—Saphenous Vein 63

Meredyth L. Jones

15 Vascular Catheterization—Lateral Thoracic Vein 65

Meredyth L. Jones

16 Vascular Catheterization—Auricular Artery and Vein 67

Meredyth L. Jones

17 Vascular Catheterization—Femoral Artery 69

Meredyth L. Jones

18 Intramedullary Cannulation of the Femur for Administration of Parenteral Fluids 71

David E. Anderson

19 Intraperitoneal Cannula for Plasma or Fluid Administration 75

David E. Anderson

20 Caudal (Sacro-coccygeal) Epidural Anesthesia 78

Matt D. Miesner

21 Epidural Catheterization 80

Matt D. Miesner

22 Lumbo-Sacral Epidural Anesthesia 85

Matt D. Miesner

Section V Head and Neck 89

23 Anatomical Features of the Head and Neck 91

David E. Anderson

- 24 Dental Examination and Trimming** 95
Meredyth L. Jones
- 25 Tooth Extraction—Oral Approach** 100
David E. Anderson
- 26 Tooth Extraction—Lateral Approach to Premolars and Molars** 105
David E. Anderson
- 27 Examination of the Ear** 110
Matt D. Miesner

Section VI Skin 115

- 28 Anatomical Comments on the Skin** 117
Matt D. Miesner
- 29 Skin Scraping** 121
Meredyth L. Jones and Patricia Payne
- 30 Skin Biopsy** 124
Meredyth L. Jones
- 31 Toenail Trimming** 128
Meredyth L. Jones

Section VII Respiratory 131

- 32 Thorax Anatomy and Auscultation** 133
Matt D. Miesner
- 33 Tracheotomy/Tracheostomy** 135
Matt D. Miesner
- 34 Field Diagnosis of Choanal Atresia** 139
David E. Anderson
- 35 Transtracheal Wash** 143
Matt D. Miesner

Section VIII Abdomen 147

- 36 Anatomical Comments on the Camelid Abdomen** 149
Matt D. Miesner
- 37 Abdominal Ultrasound** 152
Matt D. Miesner

- 38 Abdominocentesis** 157
Matt D. Miesner
- 39 Liver Biopsy** 161
Meredyth L. Jones
- 40 First Compartment Paracentesis (Rumenocentesis) and Fluid Evaluation** 165
Meredyth L. Jones
- 41 Intubation of the First Forestomach Compartment (“C1” or “Pseudorumen”)** 169
David E. Anderson
- 42 Laparotomy—Lateral Approach** 173
David E. Anderson
- 43 Laparotomy—Ventral Midline** 180
David E. Anderson
- 44 Laparoscopy** 186
David E. Anderson
- 45 Creation of Stoma into First Forestomach Compartment (“Rumenostomy”)** 191
David E. Anderson

Section IX Musculoskeletal 195

- 46 Musculoskeletal Anatomy and Ambulation** 197
David E. Anderson
- 47 Regional Intravenous Drug Perfusion** 200
Meredyth L. Jones

Section X Urinary System 203

- 48 Urinary Tract Examination and Anatomy** 205
Meredyth L. Jones
- 49 Urethral Catheterization** 208
Meredyth L. Jones
- 50 Ultrasound of the Urinary System** 212
Matt D. Miesner
- 51 Cystocentesis** 217
Meredyth L. Jones

Section XI Female Genital Anatomy 221**52 Comments Regarding Female Genital Anatomy 223***David E. Anderson***53 Pregnancy Diagnosis 226***David E. Anderson***54 Procedure: Vaginoscopy and Uterine Culture 232***David E. Anderson***55 Teat and Udder Examination 236***David E. Anderson***56 Mastectomy (Udder Amputation) 239***Matt D. Miesner***57 Cesarean Section 243***David E. Anderson***58 Diagnosis and Management of Uterine Torsion 247***David E. Anderson***Section XII Male Genital Anatomy 253****59 Male Genitalia Anatomical Comments and Breeding Behavior and Soundness 255***David E. Anderson***60 Examination of the Penis and Prepuce 258***David E. Anderson***61 Examination of Accessory Sex Glands 261***David E. Anderson***62 Examination of the Scrotum and Testicles 264***David E. Anderson***63 Semen Collection and Evaluation 267***David E. Anderson***64 Castration 272***Meredyth L. Jones*

Section XIII Nervous System 277

65 Neurological Examination and Anatomy 279

Meredyth L. Jones and Matt D. Miesner

66 Cerebrospinal Fluid Collection and Interpretation 283

Meredyth L. Jones

Section XIV Ophthalmology 287

67 Eye Exam 289

Tracy Miesner and Matt Miesner

68 Nasolacrimal Duct Cannulation 293

Meredyth L. Jones

69 Conjunctivorhinostomy for Alleviation of Nasolacrimal Duct Obstruction 295

David E. Anderson

70 Ocular Extirpation 298

David E. Anderson

71 Subpalpebral Lavage System 301

Tracy Miesner

72 Conjunctival Pedicle Graft 305

Tracy Miesner and Matt Miesner

Section XV Miscellaneous 309

73 Blood Transfusion 311

Meredyth L. Jones

74 Plasma Transfusion 315

Meredyth L. Jones

Index 317