

Table of contents

Chapter 1 Introduction 1

The Veterinary Technician's Role in Pathology 1

Technician Duties and Required Skills 1

Diagnosis 3

Immunity 3

Factors Involved in Infectious Disease 4

Common Terminology Necessary for Understanding Pathology 4

Chapter 2 Canine Infectious Disease 7

Canine Distemper Virus (CDV) or Hard Pad Disease 7

Canine Parvovirus Type 2 (CPV-2) 10

Canine Adenovirus Type 1 (CAV-1) or Infectious Canine Hepatitis (ICH) 13

Canine Infectious Tracheobronchitis or Kennel Cough 14

Leptospirosis 16

Canine Influenza Virus (CIV) or Dog Flu 18

Chapter 3 Feline Infectious Disease 21

Feline Panleukopenia (FPV), Feline Distemper, Feline Parvo, Feline Infectious Enteritis 21

Feline Leukemia Virus (FeLV) 24

Feline Immunodeficiency Virus (FIV) or Feline AIDS 27

Feline Infectious Peritonitis (FIP or FIPV) 28

Feline Upper Respiratory Tract Infections 31

Toxoplasmosis 34

Chapter 4 Rabies 37

Rabies Virus 37

Chapter 5 Gastrointestinal Tract Disease 43

Oral Cavity 43

Periodontal Disease or Periodontitis 43

Papilloma or Puppy Warts 44

Epulis 45

Oral Melanoma 45

Oral Squamous Cell Carcinoma (SCC) 48

Oral Fibrosarcoma 49

Salivary Mucocele, Sialocele, or Salivary Gland Cyst 51

Esophagus 52

Megaesophagus or Acquired Paralysis 52

Esophageal Obstructions or Foreign Bodies 54

Vascular Ring Anomaly (VRA) or Persistent Right Aortic Arch (PRAA) 55

Gastroesophageal Reflux 55

Stomach 56

Acute Gastritis 56

Gastric Ulcers 57

Gastrointestinal Obstructions 57

Pyloric Stenosis or Chronic
Hypertrophic Gastropathy 58

Gastric Dilatation and Volvulus (GDV) 60

Intestines 62

Intussusception 62

Linear Foreign Bodies 63

Inflammatory Bowel Disease 64

Megacolon 64

Intestinal Neoplasia 66

Liver 66

Cholangiohepatitis 66

Portal Systemic Shunt (PSS) or Portal Caval Shunt 68

Feline Hepatic Lipidosis (FHL) or Fatty Liver Disease 69

Hepatic Neoplasia 70

Pancreas 71

Acute Pancreatitis 71

Chronic Pancreatitis 73

Exocrine Pancreatic Insufficiency or Pancreatic Maldigestion 73

Pancreatic Neoplasia 74

Chapter 6 Urinary Tract Disease 77

Bacterial Cystitis or Urinary Tract Infection 77

Pyelonephritis 78

Urolithiasis (Urinary Calculi or Urinary Stones) 79

Urinary Obstruction or Blocked Tom (Feline) 81

Feline Urinary Tract Disease (FLUTD) 83

Acute Renal Failure (ARF) 83

Chronic Renal Failure (CRF), Chronic Kidney Disease (CKD), or Chronic Renal Disease (CRD) 85

Chapter 7 Reproductive Disease 87

Vaginitis 87

Pyometra 88

Dystocia 89

Mastitis 90

Mammary Neoplasia 90

Prostate Disease 91

Testicular Disease 92

Male Reproductive Neoplasia 93

Chapter 8 Endocrine Disease 95

Hyperthyroidism 95

Hypothyroidism 96

Hyperadrenocorticism or Cushing's Disease/Syndrome 97

Hypoadrenocorticism or Addison's Disease 99

Diabetes Mellitus or Sugar Diabetes 100

Diabetes Insipidus (DI), or Weak or Watery Diabetes 102

Chapter 9 Ocular Disease 105

Conjunctivitis or Pink Eye 105

Epiphora 106

Third Eyelid Prolapse or Cherry Eye 107

Entropion/Ectropion 108

Glaucoma 109

Corneal Ulcers 111

Chronic Superficial Keratitis or Pannus 112

Keratoconjunctivitis Sicca or Dry Eye 112

Anterior Uveitis, Iridocyclitis, or Soft Eye 113

Cataracts 113

Progressive Retinal Atrophy (PRA) or Progressive Retinal Degeneration (PRD) 114

Chapter 10 Integumentary Disease 117

Parasitic Skin Infections 117

Flea Allergy Dermatitis (FAD) 117

Ticks 119

Otodetic Mange or Ear Mites 120

Sarcoptes or Scabies or Sarcoptic Mange 121

Demodex or Demodetic Mange or Demodicosis 122

Pediculosis or Lice 123

Cuterebra Larvae or Botfly Larvae 124

Facultative Myiasis-Producing Flies or Maggots 125

Fungal Skin Infections 126

Yeast 126

Dermatophytosis or Ringworm 127

Miscellaneous Skin Disorders 129

Pyoderma or Bacterial Folliculitis 129

Seborrhea 129

Acute Moist Dermatitis or Traumatic Dermatitis or Hot Spots 130

Atopy or Allergic Dermatitis 131

Food Allergy 133

Epidermal Inclusion Cysts or Sebaceous Cysts 134

Feline Acne 134

Neoplasias Originating from the Skin and Associated Structures 135

Cutaneous Mast Cell Tumor 135

Cutaneous Histiocytoma 137

Melanoma 137

Cutaneous Squamous Cell Carcinoma 138

Lipoma 139

Chapter 11 Musculoskeletal Disease 141

Bone Fractures 141

Osteosarcoma (OSA) 143

Panosteitis (Pano) 146

Osteoarthritis or Degenerative Joint Disease (DJD) 146

Hip Dysplasia 148

Osteochondritis Dissecans (OCD) 151

Patellar Luxation 152

Cranial or Anterior Cruciate Ligament (CCL or ACL) Rupture or Cranial Cruciate Ligament Disease (CCLD) 153

Intervertebral Disk Disease (IVDD) 156

Myasthenia Gravis 159

Chapter 12 Hematologic and Lymph Disease 163

Erythrocyte Disorders 163

Anemia 163

Immune-Mediated Hemolytic Anemia (IMHA) 166

Absolute Erythrocytosis or Polycythemia 168

Leukocyte and Lymph Disorders 169

Malignant Lymphoma or Lymphosarcoma (LSA) 169

Multiple Myeloma (Plasma Cell Tumor) 170

Chylothorax 171

Thrombocyte and Coagulation Disorders 172

Primary Immune-Mediated Thrombocytopenia (PIMT) or Idiopathic Thrombocytopenia 172

Hemophilia 172

von Willebrand's Disease 173

Disseminated Intravascular Coagulopathy 174

Rodenticide Toxicity 175

Feline Aortic Thromboembolism (FATE) or Feline Saddle Thrombus 176

Chapter 13 Diseases of Rabbits, Guinea Pigs, and Chinchillas 179

Urolithiasis/Bladder Sludge 179

Gastric Stasis 181

Ulcerative Pododermatitis, Bumblefoot, or Sore Hock 182

Malocclusion or Slobbers 183

Heat Stroke 185

Respiratory Infection 185

Mastitis 186

Rabbit Hairballs or Trichobezoar 187

Rabbit Buphthalmia 188

Rabbit Uterine Adenocarcinoma 188

Scurvy 190

Antibiotic-Associated Enterotoxemia 190

Streptococcal Lymphadenitis, Cervical Lymphadenitis, or Lumps 191

Cavian Cytomegalovirus (CMV) 192

Cavian Leukemia/Lymphosarcoma 192

Guinea Pig Dystocia 193

Chinchilla Fur Slip and Fur Chewing 193

Chinchilla Gastric Tympany (Bloat) 194

Chapter 14 Diseases of Ferrets 197

Pancreatic Beta Cell Tumor or Insulinoma 197

Adrenal Disease or Hyperadrenocorticism 198

Aplastic Anemia/Estrogen Toxicity 200

Lymphoma/Lymphosarcoma 201

Influenza 202

Epizootic Catarrhal Enteritis (ECE) or Green Slime Diarrhea 202

Ferret Systemic Coronavirus (FRSCV) or Ferret FIP 203

Canine Distemper 204

Gastric Foreign Bodies 205

Chapter 15 Diseases of Hamsters, Gerbils, and Rats 207

Malocclusions 207

Proliferative Ileitis, Proliferative Enteritis, or Wet Tail 209

Antibiotic-Associated Enterotoxemia or Clostridial Enteropathy 210

Tyzzer's Disease or *Clostridium piliforme* 210

Respiratory Infections 211

Neoplasia 212

Ulcerative Pododermatitis or Bumblefoot 213

Chromodacryorrhea or Red Tears 215

Arteriolar Nephrosclerosis or Hamster Nephrosis or Renal Failure 216

Lymphocytic Choriomeningitis Virus (LCMV) 216

Gerbil Epileptiform Seizures 217

Gerbil Tail Slip or Tail Degloving 217

Index 219