

Section I: Surgical Biology

1. Shock: Pathophysiology, Diagnosis, Treatment, and Physiologic Response to Trauma
2. The Systemic Inflammatory Response
3. Fluids, Electrolytes, and Acid-Base Therapy
4. Hemostasis, Surgical Bleeding, and Transfusion
5. Wound Healing
6. Metabolism and Nutritional Support of the Surgical Patient
7. Surgical Site Infection
8. Regenerative Medicine

Section II: Surgical Methods

9. Hygiene in the Surgical Area: Surgical Textiles, Instrument, Processing, Antiseptics and Disinfection
10. Preparation of Surgery: Decision Making / Operative Risk, Patient, Facility, Operating Team, Report
11. Surgical Instruments
12. Surgical Techniques
13. Minimally Invasive Surgical Techniques
14. Cryosurgery
15. Lasers in Veterinary Surgery
16. Suture Materials and Patterns,
17. Drains, Bandages, and External Coaptation

Section III: Recent Advances in Anesthesia

18. Balanced Inhalation Anesthesia
19. Modern Injection Anesthesia for Horses
20. Anesthesia and Analgesia for Foals
21. Recovery from Anesthesia
22. Complications of Inhalation Anesthesia and Their Management
23. Chemical Restraint for Standing Procedures
24. Equine Pain Management

Section IV: Integumentary System

25. Principles of Plastic and Reconstructive Surgery
26. Skin Grafting
27. Management of Superficial Wounds, Deep and Chronic Wounds, Sinus Tracts,

and Fistulas

28. Skin Conditions Amenable to Surgery

Section V: Alimentary System

Upper Alimentary System

29. Oral Cavity and Salivary Glands

30. Esophagus

31. Stomach and Duodenum

32. Spleen and Liver

Lower Alimentary System

33. Colic: Diagnosis, Surgical Decision, Preoperative Management, and Surgical Approaches to the Abdomen

34. Principles of Intestinal Surgery and Determination of Intestinal Viability

35. Jejunum and Ileum

36. Cecum

37. Large Colon

38. Transverse and Small Colon

39. Rectum and Anus

40. Abdominal Hernias

41. Postoperative Care, Complications, And Reoperation Of The Colic Patient

Section VI: Respiratory System

42. Overview of the Upper Airway Function

43. Diagnostic Techniques in Equine Upper Respiratory Tract Disease

44. Nasal Passages and Paranasal Sinuses

45. Pharynx

46. Larynx

47. Guttural Pouch

48. Trachea

49. Thoracic Disorders

Section VII: Nervous System

50. Anatomy and Physiology of the Nervous System

51. Diagnostic Procedures

52. Pharmaceutical Considerations for Treatment of the Central Nervous System

53. Vertebral Column and Spinal Cord

54. Neurocranium and Brain

55. Peripheral Nerve Injuries

Section VIII: Eye and Adnexa

- 56.Surgery of the Globe and Orbit
- 57.Adnexal Surgery
- 58.Surgery of the Ocular Surface
- 59.Intraocular Surgery

Section IX: Reproductive System

- 60.Testis
- 61.Penis and Prepuce
- 62.Vulva, Vestibule, Vagina and Cervix
- 63.Uterus and Ovaries

Section X: Urinary System

- 64.Diagnostic Techniques and Principles of Urinary Tract Surgery
- 65.Kidneys and Ureters
- 66.Bladder
- 67.Urethra

Section XI: Diagnostic Imaging

- 68.Radiology
- 69.Ultrasonography
- 70.Nuclear Scintigraphy
- 71.Computed Tomography
- 72.Magnetic Resonance Imaging

Section XII: Musculoskeletal System

- 73.Diagnostic and Regional Surgical Anesthesia of the Limbs and Axial Skeleton
- 74.Emergency Treatment and Transportation of Equine Fracture Patients
- 75.Bone Biology and Fracture Healing
- 76.Metallic Instruments and Implants
- 77.Principles of Fracture Treatment
- 78.Bone Grafts and Bone Replacements
- 79.Synovial Joint Biology and Pathobiology
- 80.Medical Treatment of Joint Disease
- 81.Surgical Treatment of Joint Disease
- 82.Arthrodesis Techniques
- 83.Management of Bursitis

84. Diagnosis and Management of Tendon and Ligament Disorders
85. Biology and Management of Muscle Disorders and Diseases
86. Synovial and Osseous Infections
87. Angular Limb Deformities
88. Flexural Limb Deformities
89. Osteochondrosis Dissecans
90. Subchondral Bone Cysts (SCLs)
91. Foot
92. Phalanges and Metacarpophalangeal and Metatarsophalangeal Joints
93. Third Metacarpal / Metatarsal Bones
94. Vestigial Metacarpal and Metatarsal Bones
95. Carpus
96. Radius and Ulna
97. Humerus
98. Shoulder
99. Tarsus
100. Tibia
101. Stifle
102. Femur and Pelvis
103. Temporomandibular Joint Disorders
104. Craniomaxillofacial Disorders
105. Postoperative Rehabilitation for the Orthopedic Patient