

TABLE OF CONTENTS – Equine Laminitis

1 Historical Perspective on Equine Laminitis, 3

Donald M. Walsh and Teresa A. Burns

2 Laminitis: An Overview, 11

James K. Belknap

3 Anatomy and Function of the Equine Digit, 13

A.H. Parks

4 Lamellar Function at the Cellular Level, 22

Christopher C. Pollitt

5 Digital Biomechanics Relevant to Laminitis, 39

Jonathan Merritt, Helen Davies and Andrew H. Parks

Part 2: Pathophysiology of Laminitis

6 Overview, 51

James K. Belknap

7 Experimental Models of Laminitis: Starch Overload, 54

Susan C. Eades

8 Experimental Models of Laminitis: Oligofructose Overload, 59

Christopher C. Pollitt and Gabriel J. Milinovich

9 Experimental Models of Laminitis: BlackWalnut Extract, 64

John F. Peroni

10 Experimental Models of Laminitis: Hyperinsulinemia, 68

Catherine McGowan and Janet Patterson-Kane

11 Hemodynamic Events in Laminitis, 75

John F. Peroni, Susan C. Eades and Simon R. Bailey

12 The Role of Thrombosis and Coagulation in Equine Laminitis, 82

Simon R. Bailey

13 Leukocytes and Inflammatory Signaling in Laminitis: Leukocytes, 91

Rafael R. Faleiros and James K. Belknap

14 Leukocytes and Inflammatory Signaling in Laminitis: Inflammatory Signaling, 102

Britta Leise

15 Role of Proteases in Laminitis, 115

Samuel J. Black, LeWang, Erica Pawlak, Fengqiu Zhang, John Loftus and Dominique Alfandari

16 Endocrine and Metabolic Dysregulation in Laminitis: Role of Pituitary Dysfunction, 134

Philip J. Johnson

17 Endocrine and Metabolic Dysregulation in Laminitis: Role of Corticosteroids, 141

Philip J. Johnson

18 Metabolic Syndrome in Humans and Horses: The Relationship Between Obesity and Insulin Resistance, 149

Teresa A. Burns and Ramiro E. Toribio

19 Dysregulation of the Lamellar Basal Epithelial Cell in Laminitis: Role of the Cytoskeleton and Cell Junctions, 167

Christopher C. Pollitt

20 Structural Dynamics of Displacement of the Distal Phalanx, 176

Andrew H. Parks

Part 3: Clinical Presentation of Equine Laminitis

21 General Clinical Aspects of the Laminitis Case, 183

Andrew van Eps

22 Sepsis-Related Laminitis, 191

Susan C. Eades

23 Laminitis in Equine Metabolic Syndrome, 196

Andy E. Durham

24 Laminitis in Pituitary Pars Intermedia Dysfunction, 204

Philip J. Johnson

25 Supporting Limb Laminitis, 210

Gary M. Baxter

Part 4: Diagnostic Evaluation of Equine Laminitis

26 Detailed Physical Examination for Laminitis, 217

Richard A. Mansmann and Hans H. Castelljns

27 Diagnostic Imaging, 226

Andrew H. Parks and James K. Belknap

28 The Digital Venogram, 240

Amy Rucker

29 Endocrine and Metabolic Evaluation in Horses with Laminitis, 252
Ramiro E. Toribio and Teresa A. Burns

Part 5: Medical Treatment of the Laminitic Patient

30 General Supportive Care for the Laminitis Case, 269
Andrea E. Floyd and Debra R. Taylor

31 Common Therapies: Anti-Inflammatory Therapy, 277
Thomas J. Divers

32 Vasoactive Drug Therapy, 284
Simon R. Bailey and Susan C. Eades

33 Analgesia, 291
Bernd Driessen and Laura Zarucco

34 Digital Hypothermia, 306
Andrew W. van Eps and Christopher C. Pollitt

35 Equine Sepsis, 316
Samuel D. Hurcombe and Susan J. Holcombe

36 Equine Metabolic Syndrome, 329
Andy E. Durham

37 Pituitary Pars Intermedia Dysfunction, 334
Dianne McFarlane, Philip J. Johnson and Harold C. Schott, II

Part 6: Treatment of Laminitis: Digital Support and Stabilization of the Distal Phalanx

38 Therapeutic Shoes: Application of Principles, 343
Stephen E. O'Grady

39 Solear Support Techniques, 354
Raul J. Bras

40 Approaching Digital Management Prior to Displacement of the Distal Phalanx, 360
Randy B. Eggleston

41 Hoof Care Management of Horses with Displacement of the Distal Phalanx, 364
Andrew H. Parks

Part 7: Treatment of the Laminitis Case

42 The Use of Casts in Equine Laminitis, 377
James K. Belknap and Raul J. Bras

43 Deep Digital Flexor Tenotomy, 382
R. Wayne Waguespack, Jr

44 Dorsal HoofWall Techniques, 391
Amy Rucker

45 Complications of Laminitis, 402
Robert J. Hunt and James K. Belknap

Part 8: Management of Chronic Laminitis

46 Management Changes in the Laminitis Case, 413
Andrew Van Eps, Robert J. Hunt, James K. Belknap and Jeff Ridley

Part 9: Prevention of Laminitis

47 Overview of Laminitis Prevention, 423
James K. Belknap and Andy E. Durham

48 Prevention of Supporting Limb Laminitis, 427
Harry J. Markwell and Gary M. Baxter

49 Prevention of Sepsis-Related Laminitis, 432
Samuel D. Hurcombe and Susan J. Holcombe

50 Nutritional Management for Avoidance of Pasture-Associated Laminitis, 436
Pat Harris

Glossary, 442

Index, 445.