

Contents for Morrissy and Weinstein: *Atlas of F*

Contributing Authors xi

Preface xiii

1 THE UPPER EXTREMITY 1

- 1.1 Woodward Repair of Sprengel Deformity 1
- 1.2 Repair of Congenital Pseudarthrosis of the Clavicle 10
- 1.3 Release of Congenital Constriction Band 15
Gary M. Lourie
- 1.4 Release of Simple Syndactyly 18
Gary M. Lourie
- 1.5 Release of Congenital Trigger Thumb 23
Gary M. Lourie
- 1.6 Excision of Duplicate Thumb 26
Gary M. Lourie
- 1.7 Transfer of Flexor Carpi Ulnaris for Wrist Flexion
Deformity 31
Gary M. Lourie
- 1.8 Correction of Thumb-in-Palm Deformity in Cerebral
Palsy 35
Gary M. Lourie
- 1.9 Closed Reduction and Intramedullary Fixation of Humeral
Shaft Fracture 41
- 1.10 Closed Reduction and Percutaneous Pinning of
Supracondylar Fracture of the Humerus 50
- 1.11 Open Reduction of Supracondylar Fracture of the
Humerus 63
- 1.12 Supracondylar Humeral Osteotomy for Correction of Cubitus
Varus 68
- 1.13 Open Reduction and Internal Fixation of Displaced Lateral
Condyle Fracture of the Humerus 73
- 1.14 Open Reduction and Internal Fixation of Fractures of the
Medial Epicondyle 80
- 1.15 Closed, Percutaneous, and Open Reduction of Radial Head
and Neck Fractures 87
- 1.16 Intramedullary Fixation of Forearm Fractures 97

2 THE SPINE 105

- 2.1 Evolution of the Treatment of Spinal Deformity 105
- 2.2 Posterior Exposure of the Thoracic and Lumbar Spine 118
- 2.3 Posterior Iliac Bone Graft 127
- 2.4 Techniques of Scoliosis Deformity Surgery 133
- 2.5 Galveston Pelvic Instrumentation 150
- 2.6 Dunn-McCarthy Pelvic Fixation 158
- 2.7 Unit Rod Fixation in the Correction of Paralytic
Spinal Deformity 163
- 2.8 Thoracoplasty 168
- 2.9 Anterior Interbody Arthrodesis with Instrumentation
for Scoliosis 178
- 2.10 Hemivertebra Excision 189
- 2.11 Anterior Strut Graft for Kyphosis 196
- 2.12 Posterior Cotrel-Dubousset Instrumentation for
Kyphosis 203
- 2.13 Posterolateral Arthrodesis for Spondylolisthesis 209
- 2.14 Direct Repair for Spondylolysis and Spondylolisthesis 216
- 2.15 One-Stage Decompression and Posterolateral and Anterior
Interbody Fusion for High-Grade Spondylolisthesis 220
- 2.16 Posterior Arthrodesis C1 to C2: Gallie Technique 229
- 2.17 Occipitocervical Facet Fusion after Laminectomy 236

- 2.18 Posterior Arthrodesis C2 to C7: Triple-Wire Technique 244
- 2.19 Release of Sternocleidomastoid Muscle 250

3 THE PELVIS AND HIP 257

- 3.1 Anterior Drainage of the Septic Hip 257
- 3.2 Anterior Approach to a Developmentally Dislocated Hip 263
- 3.3 Anteromedial Approach to a Developmentally Dislocated Hip 271
- 3.4 Medial Approach for Open Reduction of a Developmentally Dislocated Hip 278
- 3.5 Innominate Osteotomy of Salter 283
- 3.6 Transiliac Lengthening of the Lower Extremity 289
- 3.7 Pericapsular Iliac Osteotomy of Pemberton 292
- 3.8 The Pericapsular Pelvic Osteotomy of Dega 298
- 3.9 The Albee Shelf Arthroplasty 304
- 3.10 Triple Innominate Osteotomy 310
- 3.11 Ganz Periacetabular Osteotomy 319
Tim Schrader, Michael B. Millis
- 3.12 Chiari Medial Displacement Osteotomy of the Pelvis 328
- 3.13 Anterior Osteotomy for Bladder Exstrophy 335
Paul D. Sponseller
- 3.14 Staheli Shelf Procedure 342
- 3.15 Arthrodesis of the Hip Joint 348
- 3.16 Percutaneous *In Situ* Cannulated Screw Fixation of Slipped Capital Femoral Epiphysis 356
- 3.17 Open Bone Graft Epiphysiodesis for Treatment of Slipped Capital Femoral Epiphysis 365
- 3.18 Resection of the Proximal Femur for Painful Dislocation of the Hip in Cerebral Palsy 372
- 3.19 Adductor and Iliopsoas Release 379
- 3.20 Adductor Transfer 386
- 3.21 Proximal Hamstring Tenotomy 390

4 THE FEMUR 395

- 4.1 Planning an Intertrochanteric Osteotomy 395
- 4.2 Proximal Femoral Varus Osteotomy in Children using a 90-Degree Blade Plate 402
- 4.3 Proximal Femoral Osteotomy in Infants using the Altdorf Hip Clamp 412
- 4.4 Valgus Osteotomy for Developmental Coxa Vara 419
- 4.5 Valgus Osteotomy for Hinged Abduction in Perthes Disease 429
- 4.6 Proximal Femoral Rotational Osteotomy 438
- 4.7 Southwick Biplane Intertrochanteric Osteotomy for Slipped Capital Femoral Epiphysis 444
- 4.8 Osteotomy at the Base of the Femoral Neck for Slipped Capital Femoral Epiphysis 450
- 4.9 Transfer of Greater Trochanter 457
- 4.10 Closed Intramedullary Shortening of the Femur 464
- 4.11 Fragmentation, Realignment, and Intramedullary Fixation for Femoral Deformity in Osteogenesis Imperfecta (Sofield Procedure) 479
- 4.12 Closed Reduction and Spica Cast Application for the Treatment of Femoral Shaft Fracture 485
- 4.13 Flexible Intramedullary Nailing of Femoral Shaft Fractures 493
- 4.14 Closed Reduction and External Fixation of Femoral Shaft Fracture 501

- 4.15 Lengthening of the Femur with Rotational and Angular Correction with the Orthofix Limb Reconstruction System 507
- 4.16 Distal Angular Femoral Osteotomy 525
- 4.17 Distal Rotational Femoral Osteotomy using External Fixation 535
- 4.18 Distal Femoral Epiphysiodesis, Phemister Technique 542
- 4.19 Percutaneous Distal Femoral Epiphysiodesis 550
- 4.20 Hemiepiphysiodesis by Stapling to Correct Genu Valgum 555
- 4.21 Surgical Resection of Partial Growth Plate Arrest 559
- 4.22 Distal Hamstring Lengthening and Posterior Capsulotomy 566
- 4.23 Rectus Femoris Transfer 574

5 THE KNEE 579

- 5.1 Proximal Patellar Realignment (Insall Technique) 579
- 5.2 Semitendinosus Tenodesis of Patella for Recurrent Dislocation 585
- 5.3 Surgical Repair of Irreducible Congenital Dislocation of the Knee 592

6 THE TIBIA 597

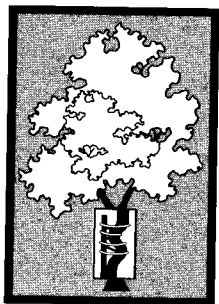
- 6.1 Dome Osteotomy of Proximal Tibia 597
- 6.2 Spike Osteotomy for Angular Deformities of the Long Bones 606
- 6.3 Transverse Wedge Osteotomy of Proximal Tibia 613
- 6.4 Oblique Wedge Osteotomy of Proximal Tibia 621
- 6.5 Oblique Coronal Osteotomy of Proximal Tibia 628
- 6.6 Double Osteotomy with Elevation of the Tibial Plateau for Blount Disease 635
- 6.7 Fragmentation, Realignment, and Intramedullary Fixation for Tibial Deformity in Osteogenesis Imperfecta (Sofield Procedure) 642
- 6.8 Tibial Lengthening with a Monolateral Fixator 652
- 6.9 Repair of Congenital Pseudarthrosis of the Tibia with Williams Rods 660
- 6.10 Proximal Tibial and Fibular Epiphysiodesis, Phemister Technique 668
- 6.11 Percutaneous Epiphysiodesis of the Proximal Tibia 675
- 6.12 Hemiepiphysiodesis of the Proximal Tibia by Stapling to Correct Genu Varum 681
- 6.13 Supramalleolar Rotation Osteotomy of the Distal Tibia and Fibula 683

- 6.14 Osteotomy of the Distal Tibia: Wiltse Technique 690
- 6.15 Opening Wedge Osteotomy for Angular Deformities of Long Bones 696
- 6.16 Screw Epiphysiodesis for Ankle Valgus 701

7 THE FOOT 705

- 7.1 Cast Treatment of Congenital Clubfoot: The Ponseti Method 705
- 7.2 Surgical Correction of Clubfoot 712
- 7.3 Resection of Calcaneonavicular Coalition 733
- 7.4 Excision of Talocalcaneal Coalition 740
- 7.5 Osteotomy of Calcaneus for Valgus 745
- 7.6 Calcaneal Lengthening Osteotomy for the Treatment of Hindfoot Valgus Deformity 751
- 7.7 Double Tarsal Osteotomy to Correct Forefoot Adduction 760
- 7.8 Plantar Release and First Metatarsal Osteotomy for Cavus Foot 767
- 7.9 Dorsal Tarsal Wedge Osteotomy for Cavus Deformity 774
- 7.10 Triple Arthrodesis 782
- 7.11 Grice Extraarticular Subtalar Arthrodesis 790
- 7.12 Extraarticular Subtalar Arthrodesis with Cancellous Graft and Internal Fixation (Dennyson-Fulford Technique) 797
- 7.13 Mitchell Bunionectomy 802
- 7.14 Proximal Metatarsal Osteotomy and Bunionectomy 809
- 7.15 Correction of Hallux Valgus and Metatarsus Primus Varus by Double Metatarsal Osteotomy 815
- 7.16 Physiolysis and Metatarsal Osteotomy in the Treatment of Longitudinal Epiphyseal Bracket of the First Metatarsal 822
- 7.17 Open Lengthening of Achilles Tendon 828
- 7.18 Percutaneous Lengthening of Achilles Tendon 835
- 7.19 Split Posterior Tibial Tendon Transfer 839
- 7.20 Transfer of the Posterior Tibial Tendon to the Dorsum of the Foot 845
- 7.21 Anterior Tibialis Transfer to the Third Cuneiform 854
- 7.22 The Butler Procedure for Overlapping Fifth Toe 858
- 7.23 Flexor Tenotomy for Curly Toe Deformity 862
- 7.24 Syme Amputation 865
- 7.25 Boyd Amputation with Osteotomy of the Tibia for Fibular Deficiency 872

INDEX 877



Contributing Authors ix
Preface to the First Edition xiii
Preface xv
Acknowledgments xvii

VOLUME 1

- 1 **Embryology and Development of the Musculoskeletal System 1**
Frederick R. Dietz and José A. Morcuende
- 2 **Growth in Pediatric Orthopaedics 35**
Alain Diméglio
- 3 **Imaging in Pediatric Orthopaedics 67**
Geetika Khanna, Georges Y. El-Khoury, and Yusuf Menda
- 4 **Evaluation of the Medical Literature 97**
Mininder S. Kocher
- 5 **The Pediatric Orthopaedic Examination 113**
David D. Aronsson
- 6 **Genetic Aspects of Orthopaedic Conditions 145**
William G. Cole
- 7 **Metabolic and Endocrine Abnormalities 167**
Benjamin A. Alman and Andrew W. Howard
- 8 **The Skeletal Dysplasias 205**
Paul D. Sponseller and Michael C. Ain
- 9 **Syndromes of Orthopaedic Importance 251**
Benjamin A. Alman and Michael J. Goldberg
- 10 **Localized Disorders of Bone and Soft Tissue 315**
William G. Mackenzie and Peter G. Gabos
- 11 **Diseases of the Hematopoietic System 357**
Roger Cornwall and John P. Dormans
- 12 **Juvenile Idiopathic Arthritis 405**
Dowain A. Wright
- 13 **Osteomyelitis and Septic Arthritis 439**
Anthony A. Stans
- 14 **Bone and Soft Tissue Tumors 493**
Dempsey S. Springfield and Mark C. Gebhardt

Contents

- 15 **Cerebral Palsy** 551
Thomas S. Renshaw and Peter A. Deluca
- 16 **Myelomeningocele** 605
Kenneth J. Noonan
- 17 **Other Neuromuscular Disorders** 649
George H. Thompson and Frank R. Berenson
- 18 **Idiopathic Scoliosis** 693
Peter O. Newton and Dennis R. Wenger

Subject Index I-1

VOLUME 2

- 19 **Congenital Scoliosis** 763
John B. Emans
- 20 **Kyphosis** 797
William C. Warner, Jr.
- 21 **Spondylolysis and Spondylolisthesis** 839
*Scott J. Luhmann, Michael F. O'Brien,
and Lawrence G. Lenke*
- 22 **The Cervical Spine** 871
Randall T. Loder
- 23 **The Upper Limb** 921
Peter M. Waters
- 24 **Developmental Hip Dysplasia and
Dislocation** 987
Stuart L. Weinstein
- 25 **Legg-Calvé-Perthes Syndrome** 1039
Stuart L. Weinstein
- 26 **Slipped Capital Femoral Epiphysis** 1085
Robert M. Kay
- 27 **Other Conditions of the Hip** 1125
Matthew B. Dobbs and José A. Morcuende
- 28 **The Lower Extremity** 1157
Perry L. Schoenecker and Margaret M. Rich
- 29 **Leg-Length Discrepancy** 1213
Colin F. Moseley

- 30** **The Foot** 1257
James R. Kasser
- 31** **The Child with a Limb Deficiency** 1329
*Raymond T. Morrissy, Brian J. Giavedoni,
and Colleen Coulter-O'Berry*
- 32** **Sports Medicine in the Growing Child** 1383
R. Baxter Willis

- 33 Management of Fractures 1429**
Charles T. Price and John M. Flynn
- 34 The Role of the Orthopaedic Surgeon in
Diagnosing Child Abuse 1527**
Tom F. Novacheck

Subject Index I-1