

References

Chapter 1

1. Daniel DM, Stone ML, Dobson BE, et al: Fate of the ACL-injured patient. A prospective outcome study, *Am J Sports Med* 22:632-644,1994.
2. Shelbourne KD, Urch SE: Primary anteriorcruciate ligament using the contralateral autogenous patellar tendon, *Am J Sports Med*28:651-2000 ,658.
3. Shelbourne KD, Rask BP: Anterior cruciate ligament reconstruction using a mini-open technique with autogenous patellar tendon graft, *Tech Orthop* 13:221-228, 1998.
4. Shelbourne KD, Wilckens JH, Mollabashy A, DeCarlo M: Arthrofi brosis in acute anterior cruciate ligament reconstruction. The effect of timing of reconstruction and rehabilitation, *Am J Sports Med* 19:332-336, 1991.
5. Shelbourne KD, Johnson GE: Locked bucket-handle meniscal tears in knees with chronic anterior cruciate ligament defi ciency, *Am J Sports Med* 21:779-782, 1993.
6. Shelbourne KD, Liotta FJ, Goodloe SL: Preemptive pain management program for anterior cruciate ligament reconstruction, *Am J Knee Surg* 11:116-119, 1998.
7. Akeson WH: The response of ligaments to stress modulation and overview of the ligament healing response. In Daniel DM, Akeson WH, O'Conner JJ, editors: *Knee Ligaments. Structure, Function, and Repair*; New York, 1990, Raven Press.
1. Naranja RJ, Corsetti J, Kuhlman JR, Torg JS: The search for the Holy Grail: a century of anterior cruciate ligament reconstruction, *Am J Orthoped* 26(11):742-752, 1997.
2. Noyes FR, DeMaio M, Mangine RE: Evaluation based protocols: a new approach to rehabilitation, *J Orthoped* 14(12):1383-1385,1991 .
3. Shelbourne KD, Nitz P: Accelerated rehabilitation after anterior cruciate ligament reconstruction, *Am J Sports Med* 18:292-299,1990.
4. Frank CB: The science of reconstruction of the anterior cruciateligament, current concept review, *J Bone Joint Surg* 79:1556-1567,1997.
5. Noyes FR: Functional properties of knee ligaments and alterationinduced by immobilization, *Clin Orthop* 123:210-242, 1977.
6. Kennedy JC, Weinberg HW, Wilson AS: The anatomy and function of the anterior cruciate ligament, *J Bone Joint Surg* 56:223-235,1974.
7. Clancy WG, Narechania RG, Rosenberg TF, et al: Anterior andposterior cruciate ligament reconstruction in rhesus monkeys: a histological, microangiographic, and biochemical analysis, *J Bone Joint Surg* 70:1483-1488, 1988.
8. DeMaio M, Noyes FR, Mangine RE: Principles for aggressive rehabilitation after reconstruction of the anterior cruciate ligament, *J Orthop* 15:505-515, 1992.
9. DeMaio M, Mangine RE, Noyes FR, Barber SD: Advanced muscle training after ACL reconstruction: weeks 5 to 52, *Orthopaedics* 15:757-767, 1992.
10. Amiel D, Kleiner JB, Roux RD, et al: The phenomenon of ligamentization: anterior cruciate ligament reconstruction with autogenous patellar tendon, *J Orthop Res* 4:162-172, 1986.
11. Burks R, Daniel D, Losse G: The effect of continuous passive motion on anterior cruciate ligament reconstruction stability, *Am J Sports Med* 12:323-326, 1984.
12. Drez D, Paine RM, Neuschwander DC, Young JC: In-vivo measurement of anterior tibial translation using continuous passive motion, *Am J Sports Med* 19:381-383, 1991.
13. Noyes FR, Mangine RE, Barber SD: Early knee motion after open and arthroscopic anterior cruciate ligament reconstruction, *Am J Sports Med* 15:149-160, 1984.
14. Salter RB: The biologic concept of continuous passive motion on synovial joints, *Clin Orthop* 242:12-25, 1989.
15. Butler D: Personal communication, 2001.
16. Noyes FR, Butler DL, Grood ES: Biomechanical analysis of human ligament grafts used in knee-ligament repairs and reconstruction, *J Bone Joint Surg* 66:344-352, 1984.
17. Beynnon BD, Fleming BC, Johnson RL, et al: Anterior cruciate ligament strain behavior during rehabilitation exercises in vivo, *Am J Sports Med* 23:24-34, 1995.
18. Jansson KA, Linko E, Sandelin J, Harilainen A: A prospective randomized study of patellar versus hamstring tendon autografts for anterior cruciate ligament reconstruction, *Am J Sports Med* 31:12-18, 2003.
19. Beynnon BD, Johnson RJ, Fleming BC, et al: Anterior cruciate ligament replacement: comparison of bone-patellar tendon-bone grafts with two strand hamstring grafts, *J Bone Joint Surg* 84A:1503- 1513, 2002.
20. Noyes FR, Barber SD, Mangine RE: Bone-patellar ligament-bone and fascia lata allografts for reconstruction of the anterior cruciate ligament, *J Bone Joint Surg* 71:1125-1132, 1990.
21. Noyes FR, Barber SD: The effect of a ligament augmentation device on allograft reconstructions for chronic ruptures of the anterior cruciate ligament, *J Bone Joint Surg* 74(7):960-968, 1992.
22. Grood ES, Suntay WJ, Noyes FR, Butler DL: Biomechanics of the knee-extension exercise, *J Bone Joint Surg* 66A:725-733, 1984.
23. Yasuda K, Sasaki T: Muscle exercise after anterior cruciate ligament reconstruction: biomechanics of the simultaneous isometric contraction method of the quadriceps and the hamstring, *Clin Orthop* 220:266-274, 1987.
24. Kennedy JC, Alexander IJ, Hayes KL: Nerve supply of the human knee and its functional importance, *Am J Sports Med* 10:329-335,1982.
25. Mangine RE, Brownstein B: Effects of joint effusion on muscle performance. Abstract in Cybex proceedings manual, education conference, Kansas City, MO, May 1984.
26. Newton RA: Joint receptor contribution to refl exive and kinesthetic responses, *Phys Ther* 2:22-29, 1982.
27. Martin SS, Spindler KP, Tarter JW, et al: Cryotherapy: an effective modality for decreasing intraarticular temperature after knee arthroscopy, *Am J Sports Med* 29:288-291, 2001.
28. Konrath GA, Lock T, Goitz HT: The use of cold therapy after anterior cruciate ligament reconstruction: a prospective, randomized study and literature review, *Am J Sports Med* 24:629-633, 1996.
29. Dodds JA, Keene JS, Graf BK, Lange RH: Results of knee manipulations after anterior cruciate ligament reconstruction, *Am J SportsMed*

19:283-287, 1991.

30. Graf B, Uhr F: Complications of intra-articular anterior cruciate reconstruction, *Clin Sports Med* 7:835, 1988.

31. Harner CD, Fu FH, Irrgang JJ, Paul JJ: Recognition and management of the stiff knee following arthroscopic anterior cruciate ligament reconstruction. Presented at the AAOS meeting, Anaheim, CA, March 1991.

32. Noyes FR, Mangine RE, Barber SD: The early treatment of motion complications following reconstruction of the anterior cruciate ligament, *Clin Orthop* 220:275-283, 1992.

33. Tambrello MT, Personius WJ, Lamb RL, et al: Patella hypomobility as a cause of extensor lag. Presented at Total Care of the Knee: Before and after Injury. Cybex Conference, Overland Park, KS, May 17-19, 1985.

34. Wojtys EM, Noyes FR, Gikas P: Patella baja syndrome. Presented at the annual meeting of the AAOS. New Orleans, LA, February 1986.

35. Shino K, Inoue M, Horibe S, et al: Maturation of allograft tendons transplanted into the knee: an arthroscopic and histological study, *J Bone Joint Surg* 70:103-121, 1988.

36. Barber SD, Noyes FR: The effect of rehabilitation and return to activity on anterior-posterior knee displacement following anterior cruciate ligament reconstruction. Unpublished data, 1991.

37. Timoney JM, Inman WS, Quesada PM, et al: Return of normal gait patterns after anterior cruciate ligament reconstruction, *Am J Sports Med* 21(6):887-889, 1993.

38. DeVita P, Lassiter T Jr, Hortobagyi T, Torry M: Functional knee brace effects during walking in patients with anterior cruciate ligament reconstruction, *Am J Sports Med* 26(6):778-784, 1998.

39. Eifert-Mangine MA, Minning S, Mangine RE: Reliability of the Biodex gait trainer system. Submitted to APTA Combined Section Meeting, New Orleans, LA, 2004.

40. Minning S, Mangine RE, Eifert-Mangine MA, Colosimo AJ: Gait normalization and relationship to KT laxity following anterior cruciate ligament reconstruction. Submitted to APTA Combined Section Meeting, New Orleans, LA, 2004.

41. Snyder-Mackler L, Delitto A, Bailey SL, Stralka SW: Strength of the quadriceps femoris muscle and functional recovery after reconstruction of the anterior cruciate ligament: a prospective, randomized clinical trial of electrical stimulation, *J Bone Joint Surg* 77:1166-1173, 1995.

42. Berlant SR: Method of determining optimal stimulation sites for transcutaneous electrical nerve stimulation, *Phys Ther* 64:924-928, 1984.

43. Gould N, Donnermeyer D, Pope M, Ashikaga T: Transcutaneous muscle stimulation as a method to retard disuse atrophy, *Clin Orthop* 164:215-220, 1982.

44. Mangine RE, Heckmann TP, Eldridge VL: Muscle response to strength training. In Scully RM, Barnes MR, editors: *Physical therapy*. Philadelphia, 1989, JB Lippincott.

45. Markolf KL, Gorek JF, Kabo M, Shapiro MS: Direct measurement of resultant forces in the anterior cruciate ligament, *J Bone Joint Surg* 72:557-562, 1990.

46. Wilk KE, Escamilla RF, Flesig GS, et al: A comparison of tibiofemoral joint forces and electromyographic activity during open and closed kinetic chain exercises, *Am J Sports Med* 24:518-527, 1996.

47. Jenkins WL, Munns SW, Jayaraman G, Werzberger KL: A measurement of anterior tibial displacement in the closed and open kinetic chain, *J Orthop Sports Phys Ther* 25:49-56, 1997.

48. Hewett TE, Paterno MV, Meyer GD: Strategies for enhancing proprioception and neuromuscular control of the knee, *Clin Orthop* 402:76-94, 2002.

49. Irrgang JJ, Anderson AF, Boland AL, et al: Development and validation of the International Knee Documentation Committee subjective knee form, *Am J Sports Med* 29:600-612, 2001.

50. Daniel DM, Malcom LL, Stone ML, et al: Quantification of knee stability and function, *Contemp Orthop* 5:83-91, 1982.

51. Wilk KE, Johnson RD, Levine B: Reliability of the Biodex B-2000, isokinetic dynamometer, *Phys Ther* 68:792, 1988 (abstract).

52. Noyes FR, Barber SD, Mangine RE: Abnormal lower limb symmetry determined by function hop tests after anterior cruciate ligament rupture, *Am J Sports Med* 19:513-518, 1991.

53. Tegner Y, Lysholm J, Lysholm M, Gillquist JA: Performance test to monitor rehabilitation and evaluate anterior cruciate ligament injuries, *Am J Sports Med* 14:156-159, 1986.

1. Denti M, Bigoni M, Dodaro G, et al: Long-term results of the Leeds-Keio anterior cruciate ligament reconstruction, *Knee Surg Sports Traumatol Arthrosc* 3:75-77, 1995.

2. Jadarvinen M, Jozsa L, Johnson RJ, et al: Effect of anterior cruciate ligament reconstruction with patellar tendon or prosthetic ligament on the morphology of the other ligaments of the knee joint. An experimental study in dogs, *Clin Orthop* 311:176-182, 1995.

3. Klein W, Jensen KU: Synovitis and artificial ligaments, *Arthroscopy* 1992, 8:116-124.

4. Savarese A, Lunghi E, Budpassi P, et al: Remarks on the complications following reconstruction using synthetic ligaments, *Ital J Orthop Traumatol* 19:79-86, 1993.

5. Macey HB: A new operative procedure for repair of ruptured cruciate ligament of the knee joint, *Surg Gynecol Obstet* 69:108-109, 1939.

6. Lindemann K: Plastic surgery in substitution of the cruciate ligaments of the knee-joint by means of pedunculated tendon transplants, *Z Orthop Ihre Grenzgeb* 79(2):316-334, 1950.

7. Cho KO: Reconstruction of the anterior cruciate ligament by semitendinosus tenodesis, *J Bone Joint Surg Am*, 57A:608-612, 1975.

8. Puddu G: Method for reconstruction of the anterior cruciate ligament using the semitendinosus tendon, *Am J Sports Med* 8:402-404, 1980.

9. Lipscomb AB, Johnston RK, Snyder RB: The technique of cruciate ligament reconstruction, *Am J Sports Med* 29:77, 1981.

10. Gomes JLE, Marczyk LRS: Anterior cruciate ligament reconstruction with a loop or double thickness of semitendinosus tendon, *Am J Sports Med* 12:199, 1984.

11. Friedman MJ: Arthroscopic semitendinosus reconstruction for anterior cruciate deficiency, *Tech Orthop* 2:74, 1988.

12. Pinczewski L: Clinical results: Pinczewski endoscopic hamstring technique utilizing the DonJoy RCI fixation screw. Australian Orthopaedic Meeting, Adelaide, Australia, 1994.

13. Rosenberg TD, Deffner KT: ACL reconstruction: semitendinosus is the graft of choice, *Orthopedics* 20:396, 1997.

14. Rosenberg TD: *Technique for endoscopic method of ACL reconstruction. Technical bulletin*, Mansfield, MA, 1993, Acufex Microsurgical.

15. Howell SM: Brace-free rehabilitation with early return to activity for knees reconstructed with double looped semitendinosus and gracilis graft, *Arthroscopy* 6:594, 1999.
16. Furman W, Marshall D, Girgis F: The anterior cruciate ligament: a functional analysis based on postmortem studies, *J Bone Joint Surg* 58A:179-185, 1976.
17. Girgis F, Marshall J, Monajem A: The cruciate ligaments of the knee joint, *Clin Orthop* 106:216-231, 1975.
18. Butler D, Noyes F, Grood E: Ligamentous restraint to anteriorposterior drawer in the human knee: a biomechanical study, *J Bone Joint Surg* 62A:256-270, 1980.
19. Hefzy M, Grood E: Sensitivity of insertion locations on length patterns of anterior cruciate ligament fibers, *J Biomech Eng* 108:73-82, 1986.
20. Noyes F, Butler D, Grood E, et al: Biomechanical analysis of human ligament grafts used in knee-ligament repairs and reconstructions, *J Bone Joint Surg* 66A:344-352, 1984.
21. Noyes F, Butler D, Paulos L, Grood E: Intra-articular cruciate reconstruction: perspectives on graft strength, vascularization, and immediate motion after replacement, *Clin Orthop* 172:71-77, 1983.
22. Noyes F, Grood E: The strength of the anterior cruciate ligament in humans and rhesus monkeys, *J Bone Joint Surg* 58A:1074-1082, 1976.
23. Rowden N, Sher D, Rogers G, Schindhelm K: Anterior cruciate ligament graft fixation: initial comparison of patellar tendon and semitendinosus autografts in young fresh cadavers, *Am J Sports Med* 25:472-478, 1997.
24. Woo S, Hollis M, Adams D, et al: Tensile properties of the human femur-anterior cruciate ligament-tibia complex, *Am J Sports Med* 19:217-225, 1991.
25. Arms SW, Pope MH, Johnson RJ, et al: The biomechanics of anterior cruciate ligament rehabilitation and reconstruction, *Am J Sports Med* 12:8-18, 1984.
26. Noyes FR, Vutler DL, Grood ES, et al: Biomechanical analysis of human ligament grafts used in knee ligament repairs and reconstructions, *J Bone Joint Surg Am* 66:334, 1984.
27. Hamner DL, Brown CH, Steiner ME: Hamstring tendon grafts for reconstruction of the anterior cruciate ligament: biomechanical evaluation of the use of multiple strands and tensioning techniques. *J Bone Joint Surg Am* 81:549-557, 1999.
28. Brahmabhatt V, Smolinski R, McGlowan J, et al: Doublestranded hamstring tendons for anterior cruciate ligament reconstruction, *Am J Knee Surg* 12:141-145, 1999.
29. Brown CH: Biomechanics of the semitendinosus and gracilis tendon grafts. American Orthopaedic Society for Sports Medicine (AOSSM), Toronto, Canada, 1995.
30. Brown CH, Steiner ME, Carson EW: The use of hamstring tendons for anterior cruciate reconstruction: technique and results, *Clin Sports Med* 12:723, 1996.
31. Schatzmann L, Brunner P, Staubli HU: Effect of cyclic preconditioning on the tensile properties of human quadriceps tendons and patellar ligaments, *Knee Surg Sports Traumatol Arthrosc* 6: S56-S61, 1998.
32. Woo SL-Y, Fox RJ, Sakane M, et al: Force and force distribution in the anterior cruciate ligament and its clinical implications, *Sportorthopaedie-Sporttraumatologie* 13:37-48, 1997.
33. Millett PJ, Miller BS, Close M, et al: Effects of braiding on tensile properties of four-strand human hamstring tendon grafts, *Am J Sports Med* 31:714-717, 2003.
34. Kim DH, Wilson DR, Hecker AT, et al: Twisting and braiding reduces the tensile strength and stiffness of human hamstring tendon grafts used for anterior cruciate reconstruction, *Am J Sports Med* 31:861-867, 2003.
35. Fu FH, Bennett CH, Ma CB, et al: Current trends in anterior cruciate ligament reconstruction. Part I: Biology and biomechanics of reconstruction, *Am J Sports Med* 27:821-830, 1999.
36. Fu FH, Bennett CH, Ma CB, et al: Current trends in anterior cruciate ligament reconstruction. Part II: Operative procedures and clinical correlations, *Am J Sports Med* 28:124-130, 2000.
37. Brand JC Jr, Weiler A, Caborn DNM, et al: Current concepts. Graft fixation in cruciate ligament reconstruction, *Am J Sports Med* 28:761-774, 2000.
38. Isibashi Y, Kim KS, Rudy T: Robotic evaluation of the effect of the tibial fixation level on the ACL reconstructed knee. 41st Meeting of the Orthopedic Research Society, Orlando, FL, 1995.
39. Kousa P, Jarvinen TLN, Vihavainen M, et al: The fixation strength of six hamstring tendon graft fixation devices in anterior cruciate ligament reconstruction. Part I: Femoral Site, *Am J Sports Med* 31:174-181, 2003.
40. Kousa P, Jarvinen TLN, Vihavainen M, et al: The fixation strength of six hamstring tendon graft fixation devices in anterior cruciate ligament reconstruction. Part II: Tibial Site, *Am J Sports Med* 31:182-188, 2003.
41. Lipscomb AB, Johnston RK, Snyder RB: Evaluation of hamstring strength following use of semitendinosus and gracilis tendons to reconstruct the anterior cruciate ligament, *Am J Sports Med* 10:340, 1982.
42. Carter TR, Edinger S: Isokinetic evaluation of anterior cruciate ligament reconstruction: Hamstring versus patellar tendon, *Arthroscopy* 15:169-172, 1999.
43. Simonian PT, Harrison SD, Cooley VJ, et al: Assessment of morbidity of semitendinosus and gracilis tendon harvest for ACL reconstruction, *Am J Knee Surg* 10:54-59, 1997.
44. Yasuda K, Tsujino J, Ohkoshi Y, et al: Graft site morbidity with autogenous semitendinosus and gracilis tendons, *Am J Sports Med* 23:706-714, 1995.
45. Cross MJ, Roger G, Kujawa, P: Regeneration of the semitendinosus and gracilis tendon following their transection for repair of the anterior cruciate ligament, *Am J Sports Med* 20:221-223, 1992.
46. Marder RA: Prospective evaluation of arthroscopically assisted anterior cruciate ligament reconstruction: Patellar tendon versus semitendinosus and gracilis tendons, *Am J Sports Med* 19:478, 1991.
47. Blackburn TA: Rehabilitation of anterior cruciate ligament injuries, *Orthop Clin North Am* 16:240-269, 1985.
48. Brewster CE, Moyens DR, Jobe FR: Rehabilitation for anterior cruciate reconstruction, *J Orthop Sports Phys Ther* 5:121-126, 1983.

49. Henning CE, Lynch MA, Glick KR: An in-vivo strain gauge study of the anterior cruciate ligament, *Am J Sports Med* 12:22-26, 1985.
50. Johnson RJ, Erickson E, Haggmark T: Five to ten year followup evaluation after reconstruction of the anterior cruciate ligament, *Clin Orthop* 183:122-140, 1984.
51. Yasuda K, Sakaki T: Muscle exercises after anterior cruciate ligament reconstruction. Biomechanics of the simultaneous isometric contraction method of the quadriceps and hamstrings, *Clin Orthop* 22:266-274, 1987.
52. Yasuda K, Sasaki T: Exercises after anterior cruciate ligament reconstruction. The force exerted on the tibia by the separate isometric contraction of the quadriceps and hamstrings, *Clin Orthop* 22:275-286, 1987.
53. Shelbourne KD, Nitz APA: Accelerated rehabilitation after anterior cruciate ligament reconstruction, *Am J Sports Med* 18:292-299, 1990.
54. Mangine RE, Noyes FR: Rehabilitation of the allograft reconstruction, *J Orthop Sports Phys Ther* 15:294-302, 1992.
55. Wilk KE, Andrews JR: Current concepts in the treatment of anterior cruciate ligament disruptions, *J Orthop Sports Phys Ther* 15:279-293, 1992.
56. Shelbourne KD, Wilckens JH, Mollabashy A, et al: Arthrofibrosis in acute anterior cruciate ligament reconstruction. The effect of timing of reconstruction and rehabilitation, *Am J Sports Med* 19:332-336, 1991.
57. Sach RA, Reznik A, Daniel DM, et al: Complication of knee ligament surgery. In Daniel DM, Akeson WH, O'Connor W, editors: *Knee ligaments; structure, function, injury and repair*, New York, 1990, Raven Press.
58. Wilk KE, Arrigo C, Andrews JR, et al: Rehabilitation after anterior cruciate ligament reconstruction in the female athlete, *J Athl Train* 34:177-193, 1999.
59. Lephart SM, Kocher MS, Fu FH, et al: Proprioception following ACL reconstruction, *J Sports Rehabil* 1:188-196, 1992.
60. Lephart SM, Pincivero DM, Giraldo JL, et al: The role of proprioception in the management and rehabilitation of athletic injuries, *Am J Sports Med* 25:130-137, 1997.
61. Wilk KE, Reinold MM, Hooks TR: Recent advances in the rehabilitation of isolated and combined anterior cruciate ligament injuries, *Orthop Clin North Am* 34:107-137, 2003.
62. Rudroff T: Functional capability is enhanced with semitendinosus than patellar tendon ACL repair, *Med Sci Sports Exerc* 35(9):1486-1492, 2003.
63. West RV, Harner CD: Graft selection in anterior cruciate ligament reconstruction, *J Am Acad Orthop Surg* 13(3):197-207, 2005.
64. deAndrade JR, Grant C, Dixon A: Joint distention and reflex muscle inhibition in the knee, *J Bone Joint Surg* 47A:312-322, 1965.
65. Spencer JD, Hayes KC, Alexander, IJ: Knee joint effusion and quadriceps reflex inhibition in man, *Arch Phys Med Rehab* 65:279-283, 1981.
66. Stokes M, Young A: Investigations of quadriceps inhibition: Implications for clinical practice, *Physiotherapy* 70:425-428, 1984.
67. Prentice WE: *Therapeutic modalities for physical therapists*, ed 2, New York, 2002, McGraw-Hill.
68. Cook H, Morales M, La Rosa E, et al: Effects of electrical stimulation on lymphatic flow and limb volume in the rat, *Phys Ther* 74:1040-1046, 1994.
69. Clancy W, Nelson D, Reider B: Anterior cruciate ligament reconstruction using one third of the patellar ligament augmented by extra-articular tendon transfers, *J Bone Joint Surg* 62A:352, 1982.
70. Scranton PE, Lanzer WL, Ferguson MS, et al: Mechanisms of anterior cruciate ligament neovascularization and ligamentization, *Arthroscopy* 14:702-716, 1998.
71. Rougraff B, Shelbourne KD, Gerth PK, Warner J: Arthroscopic and histologic analysis of human patella tendon allografts used for anterior cruciate ligament reconstruction, *Am J Sports Med* 21:277-284, 1993.
72. Falconiero RP, DiStefano VJ, Cook TM: Revascularization and ligamentization of autogenous anterior cruciate ligament grafts in humans, *Arthroscopy* 14:197-205, 1998.
73. Woo SLY, Gomez MA, Sites TJ, et al: The biomechanical and morphological changes in the medial collateral ligament of the rabbit after immobilization and remobilization, *J Bone Joint Surg* 69A:1200-1211, 1987.
74. Kielty CM, Shuttleworth CA: Synthesis and assembly of fibronectin by fibroblasts and smooth muscle cells, *J Cell Sci*, 106:167-173, 1993.
75. Snyder-Mackler L, DeLitto A, Bailey SL, Stralka SW: Strength of the quadriceps femoris muscle and functional recovery after reconstruction of the anterior cruciate ligament, *J Bone Joint Surg* 77A:1166-1172, 1995.
76. Sachs R, Daniel DM, Stone ML, Garfein RF: Patellofemoral problems after anterior cruciate ligament reconstruction, *Am J Sports Med* 17:760-765, 1989.
77. Gerber C, Hoppeler H, Claassen H, et al: The lower extremity musculature in chronic symptomatic instability of the anterior cruciate ligament, *J Bone Joint Surg* 67A:1034-1043, 1985.
78. Wigerstad-Lossing I, Grimby G, Jonsson T, et al: Effects of electrical muscle stimulation combined with voluntary contractions after knee ligament surgery, *Med Sci Sports Exerc* 20:93-98, 1988.
79. DeLitto A, McKowen JM, McCarthy JA, et al: Electrically elicited co-contraction of thigh musculature after anterior cruciate ligament surgery. A description and single-case experiment, *Phys Ther* 68:45-50, 1988.
80. Snyder-Mackler L, Ladin Z, Schepsis AA, Young JC: Electrical stimulation of the thigh muscles after reconstruction of the anterior cruciate ligament. Effects of electrically elicited contraction of the quadriceps femoris and hamstring muscles on gait and on strength of the thigh muscles, *J Bone Joint Surg* 73A:1025-1036, 1991.
81. Rebal H, Barra V, Laborde A, et al: Effects of two electrical stimulation frequencies in thigh muscle after knee surgery, *Int J Sports Med* 23:604-609; 2002.
82. Sherbondy PS, Queale WS, McFarland EG, et al: Soleus and gastrocnemius muscle loading decreases anterior tibial translation in anterior cruciate ligament intact and deficient knees, *J Knee Surg* 16:152-158, 2003.
83. Rudrud JA, Kollwelter KA, Davies GJ, et al: Closed kinetic chain weight bearing response following knee surgery, *Phys Ther* 30:A-48, 2000 (abstract).
84. Davies GJ, Zilmer DA: Functional progression of a patient through a rehabilitation program, *Orthop Phys Ther Clin North Am* 9:103-118, 2000.

85. Davies GJ, Zilmer DA: Functional progression of exercise during rehabilitation. In Ellenbecker TS, editor: *Knee Ligament Rehabilitation*, Philadelphia, 2000, Churchill Livingstone.
86. Manske RC, Davies GJ: A nonsurgical approach to examination and treatment of the patellofemoral joint. Part 1: Examination of the patellofemoral joint, *Crit Rev Phys Rehabil Med* 15:141-166, 2003.
87. Manske RC, Anderson J: Test-retest reliability of the lower extremity functional reach test, *J Orthop Sports Phys Ther* 34(1): A52-53, 2004 (abstract).
88. Manske RC, Smith B, Wyatt F: Test-retest reliability of lower extremity functional tests after a closed kinetic chain isokinetic testing bout, *J Sports Rehabil* 12:119-132, 2003.
89. Malliou P, Ispirlidis I, Beneka A, et al: Vertical jump and knee extensors isokinetic performance in professional soccer players related to the phase of the training period, *Isokin Exerc Sci* 11:165-169, 2003.

1. American Academy of Orthopaedic Surgeons (AAOS): *ACL Reconstruction*, AAOS Bulletin, Feb 2004.
2. Centers for Disease Control and Prevention (CDC): Invasive *Streptococcus pyogenes* after allograft implantation—Colorado, 2003. *MMWR Morb Mortal Wkly Rep* 52:1173-1176, 2003.
3. Vangsness, CT: *Overview of allograft soft tissue processing*, AAOS Bulletin, Feb 2004.
4. Jackson, DW, Windler, GE, Simon TM: Intraarticular reaction associated with the use of freeze-dried, ethylene oxide-sterilized bone-patella-tendon-bone allografts in the reconstruction of the anterior cruciate ligament, *Am J Sports Med* 18(1):1-10, 1990.
5. Nikolaou PK, Seaber AV, Glisson RR, et al: Anterior cruciate ligament allograft transplantation. Long-term function, histology, revascularization, and operative technique, *Am J Sports Med* 14: 348-360, 1986.
6. Centers for Disease Control and Prevention (CDC). CDC update: allograft-associated bacterial infections—United States, 2002, *MMWR Morb Mortal Wkly Rep* 51:207-210, 2002.
7. Mellonig JT, Prewett AB, Moyer MP: HIV inactivation in a bone allograft, *J Periodontol* 63:979-983, 1992.
8. Siebold R, Buelow JU, Bos L, Ellerman A.: Primary ACL reconstruction with fresh-frozen patellar versus Achilles tendon allografts, *Arch Orthop Trauma Surg* 123:180-185, 2003.
9. Siebold R, Buelow JU, Boes L, Ellermann A: Primary- and revision-reconstruction of the anterior cruciate ligament with Agility ladder. With this exercise the patient performs the drill as fast as possible while maintaining balance and form. allografts: a retrospective study including 325 patients, *Zentralbl Chir* 127:850-854, 2002.
10. Gorschewsky O, Browa A, Vogel U, Stauffer E: Clinico-histologic comparison of allogenic and autologous bone tendon-bone using one-third of the patellar tendon in reconstruction of the anterior cruciate ligament, *Unfallchirurg* 105:703-714, 2002.
11. Noyes FR, Barber-Westin SD: Reconstruction of the anterior cruciate ligament with human allograft: comparison of early and later results, *J Bone Joint Surg* 78A:524-537, 1996.
12. Shelton WR, Papendick L, Dukes AD: Autograft versus allograft anterior cruciate ligament reconstruction, *Arthroscopy* 13: 446-449, 1997.
13. Chang SK, Egami DK, Shaieb MD, et al: Anterior cruciate ligament reconstruction: allograft versus autograft, *Arthroscopy* 19:453-462 2003.
14. Shino K, Nakata K, Horibe S, et al: Quantitative evaluation after arthroscopic anterior cruciate ligament reconstruction: allograft versus autograft, *Am J Sports Med* 21:609-616, 1993.
15. Lawhorn KW, Howell SM: Scientific justification and technique for anterior cruciate ligament reconstruction using autogenous and allogeneic soft-tissue grafts, *Orthop Clin North Am* 34:19-30, 2003.
16. Stickland SM, MacGillivray JD, Warren RF: Anterior cruciate ligament reconstructions with allograft tendons, *Orthop Clin North Am* 34:41-47, 2003.
17. Miller SL, Gladstone JN: Graft selection in anterior cruciate ligament reconstruction, *Orthop Clin North Am* 33:675-683, 2002.
18. Fuch R, Wheatley W, Uribe JW, et al: Intra-articular anterior cruciate ligament reconstruction using patellar tendon allograft in the skeletally immature patient, *Arthroscopy* 18:824-828, 2002.
19. Bettany JA, Fish DR, Mendel FC: Influence of high voltage pulsed direct current in edema formation following impact injury, *Phys Ther* 70:219-224, 1990.
20. Hopkins JT, Ingersoll CD, Edwards J, et al: Cryotherapy and transcutaneous electric neuromuscular stimulation decrease arthrogenic muscle inhibition of the vastus medialis after knee joint effusion, *J Athl Train* 37:25-31, 2001.
21. Noyes FR, Berrios-Torres S, Barber-Westin SD, et al: Prevention of permanent arthrofibrosis after anterior cruciate ligament reconstruction alone or combined with associated procedures: a prospective study in 443 knees, *Knee Surg Sports Traumatol Arthrosc* 8:2000, 196-206.
22. Wilk KE, Arrigo C, Andrews JR, et al: Rehabilitation after anterior cruciate ligament reconstruction in the female athlete, *J Athl Train* 34:177-193, 1999.
23. Shelbourne KD, Nitz P: Accelerated rehabilitation after anterior cruciate ligament reconstruction, *Am J Sports Med* 18:292-299, 1990.
24. Warren CG, Lehman JF, Koblanski NJ: Elongation of rat tail tendon: effects of load and temperature, *Arch Phys Med Rehabil* 52:465, 1971.
25. Warren CG, Lehman JF, Koblanski NJ: Heat and stretch technique: an evaluation using rat tail tendon, *Arch Phys Med Rehabil* 57:122, 1976.
26. Faugli HP, editor: *Medical exercise therapy*, Abildsø N-Oslo, Lærerguppen for Medisinsk Treningsterapi AS, 1996.
27. Dutton M: *Orthopaedic examination, evaluation, and intervention*, New York, McGraw-Hill, 2004.
28. Salter RB: *Textbook of disorders and injuries of the musculoskeletal system*, Baltimore, Williams and Wilkins, 1983.
29. DeLee JC, Drez Jr D, editors: *Orthopaedic sports medicine: principles and practice*, vol 2, Philadelphia, 1994, Saunders.
30. Brotzman SB, editor: *Clinical orthopaedic rehabilitation*, St. Louis, 1996, Mosby.
31. Fritz JM, Irrgang JJ, Harner CD: Rehabilitation following allograft meniscal transplantation: a review of the literature and case study, *J Sports Phys Ther* 24:98-106, 1996.
32. Gray JC: Neural and vascular anatomy of the menisci of the human knee, *J Sports Phys Ther* 29:23-30, 1999.
33. Lessard LA, Scudds RA, Amendola A, et al: The efficacy of cryotherapy following arthroscopic knee surgery, *J Sports Phys Ther* 26:14-

1997,22.

34. Prentice WE: *Therapeutic modalities for physical therapists*, ed 2, New York, 2002, McGraw-Hill.
 35. Nelson RM, Currier DP, editors: *Clinical electrotherapy*, ed 2, EastNorwalk, 1991, Appleton & Lange.
 36. Snyder-Mackler L, Delitto A, Stralka SW, et al: Use of electricalstimulation to enhance recovery of quadriceps femoris muscle force production in patients following anterior cruciate ligament reconstruction,*Phys Ther* 74:901-907, 1994.
 37. Fitzgerald GK: Open versus closed kinetic chain exercise: issuesin rehabilitation after anterior cruciate ligament reconstructivesurgery, *Phys Ther* 77:1747-1754, 1997.
 38. Yack HJ, Collins CE, Whieldon TJ: Comparison of closed andopen kinetic chain exercise in the anterior cruciate ligament–defi cient knee, *Am J Sports Med* 21:49-54, 1993.
 39. Hattin HC, Pierrynowski MR, Ball KA: Effect of load, cadence,and fatigue on tibiofemoral joint force during a half squat, *Med Sci Sports Exerc* 21:613-618, 1989.
 40. Escamilla RF, Fleisig GS, Zheng N, et al: Biomechanics of the knee during closed kinetic chain and open kinetic chain exercises,*Med Sci Sports Exerc* 30:556-569, 1998.
 41. Morrissey MC, Harman EA, Frykman PN, et al: Early phasedifferential effects of slow and fast barbell squat training, *Am J Sports Med* 36:221-230, 1998.
 42. Williams GN, Chmielewski T, Rudolph KS, et al: Dynamic kneestability: current theory and implications for clinicians and scientists, *J Orthop Sports Phys Ther* 10:546-566, 2001.
 43. Fridén T, Roberts D, Ageberg E, et al: Review of knee proprioception and the relation to extremity function after an anterior cruciateligament rupture, *J Orthop Sports Phys Ther* 10:567-576, 2001.
-
1. Johnson R: Prevention of cruciate ligament injuries. In Feagin JJ, editor: *The crucial ligaments: diagnosis and treatment of ligamentous injuries about knee*, New York, 1988, Churchill Livingstone.
 2. Griffi n LY, Angel MJ, Albohm EA, et al: Noncontact anterior cruciate ligament injuries: risk factors and prevention strategies, *J Am Acad Orthop Surg* 8(3):141-150, 2000.
 3. Myklebust G, Engebretsen IH, Braekken A, et al: Prevention ofanterior cruciate ligament injuries in female team handball players:a prospective intervention study over three seasons, *Clin J SportsMed* 13(2):71-78, 2003.
 4. von Porat A, Roos EM, Roos H: High prevalence of osteoarthritis14 years after an anterior cruciate ligament tear in male soccerplayers: a study of radiographic and patient relevant outcomes, *AnnRheum Dis* 63(3):269-273, 2004.
 5. McNair PJ, Marshall RN, Matheson JA: Important features associatedwith acute anterior cruciate ligament injury, *N Z Med J*103(901):537-539, 1990.
 6. Boden BP, Garrett WE: Mechanisms of injuries to the anteriorcruciate ligament, *Med Sci Sports Exerc* 28(5S):156, 1996(abstract).
 7. Arendt E, Dick R: Knee injury patterns among men and womenin collegiate basketball and soccer. NCAA data and review of literature, *Am J Sports Med* 23(6):694-701, 1995.
 8. Pearl AJ: American Orthopaedic Society for Sports Medicine: The athletic female. In *The athletic female*, Champaign, IL, 1993,Human Kinetics.
 9. Uhorchak JM, Scoville CR, Williams GN, et al: Risk factors associated with noncontact injury of the anterior cruciate ligament: a prospective four-year evaluation of 859 West Point cadets, *Am J Sports Med* 31(6):831-842, 2003.
 10. Yu B, Kirkendall DT, Taft TN, et al: Lower extremity motor control–related and other risk factors for noncontact anterior cruciate ligament injuries, *Instr Course Lect* 51:315-324, 2002.
 11. Griffi s ND, Vequist SW, Yearout KM: Injury prevention of the anterior cruciate ligament. In *AOSSM 15th annual meeting*, Traverse City, MI, 1989, American Orthopaedic Society for Sports Medicine.
 12. Teitz CC: Unpublished data, 1999.
 13. Magee DJ: *Orthopedic physical assessment*, Philadelphia, 1987, WB Saunders.
 14. Shambaugh JP, Klein A, Herbert JH: Structural measures as predictors of injury in basketball players, *Med Sci Sports Exerc*,522-527:(5)23 1991.
 15. Huston LJ, Greenfi eld ML, Wojtys EM: Anterior cruciate ligament injuries in the female athlete. Potential risk factors, *Clin Orthop* 372:50-63, 2000.
 16. Norwood LA Jr, Cross MJ: The intercondylar shelf and the anteriorcruciate ligament, *Am J Sports Med* 5(4):171-176, 1977.
 17. Shelbourne K, Davis T, Klootwyk T: The relationship between intercondylar notch width of the femur and the incidence ofanterior cruciate ligament tears, *Am J Sports Med* 26:402-408,1998 .
 18. Houseworth SW, Mauro VJ, Mellon BA, et al: The intercondylar notch in acute tears of the anterior cruciate ligament: a computer graphics study, *Am J Sports Med* 15(3):221-224, 1987.
 19. Lund-Hanssen H, Gannon J, Engebretsen L, et al: Intercondylar notch width and the risk for anterior cruciate ligament rupture. A case-control study in 46 female handball players, *Acta Orthop Scand* 65(5):529-532, 1994.
 20. Schickendantz MS, Weiker GG: The predictive value of radiographs in the evaluation of unilateral and bilateral anterior cruciate ligament injuries, *Am J Sports Med* 21(1):110-113, 1993.
 21. Teitz CC, Lind BK, Sacks BM: Symmetry of the femoral notch width index, *Am J Sports Med* 25(5):687-690, 1997.
 22. Souryal TO, Moore HA, Evans JP: Bilaterality in anterior cruciate ligament injuries: associated intercondylar notch stenosis, *Am J Sports Med* 16(5):449-454, 1988.
 23. Rozzi S, Lephart SM, Gear WS, et al: Knee joint laxity characteristics of male and female soccer and basketball players, *Am J Sports Med* 27(3):312-319, 1999.
 24. Nicholas JA: Injuries to knee ligaments. Relationship to loosenessand tightness in football players, *JAMA* 212(13):2236-2239,1970 .
 25. Grana WA, Moretz JA: Ligamentous laxity in secondary school athletes, *JAMA* 240(18):1975-1976, 1978.
 26. Godshall RW: The predictability of athletic injuries: an eight-year study, *J Sports Med* 3(1):50-54, 1975.

27. Caraffa A, Cerulli G, Proietti M, et al: Prevention of anterior cruciate ligament injuries in soccer. A prospective controlled study of proprioceptive training, *Knee Surg Sports Traumatol Arthrosc* 1996 ,19-21:(1)4 .
28. Hewett TE, Lindenfeld TA, Riccobene JV, et al: The effect of neuromuscular training on the incidence of knee injury in female athletes. A prospective study, *Am J Sports Med* 27(6):699-706, 1999.
29. Mandelbaum BR, Silvers HJ, Watanabe DS, et al: Effectiveness of a neuromuscular and proprioceptive training program in preventing the incidence of ACL injuries in female athletes: a two year follow-up, *Am J Sports Med* 33(7):1003-1010.
30. Frankovich RJ, Lebrun CM: Menstrual cycle, contraception, and performance, *Clin Sports Med* 19(2):251-271, 2000.
31. Sarwar R, Beltran NB, Rutherford OM: Changes in muscle strength, relaxation rate and fatigability during the human menstrual cycle, *J Physiol* 493(1):267-272, 1996.
32. Wojtys EM, Huston LJ, Lindenfeld TN, et al: Association between the menstrual cycle and anterior cruciate ligament injuries in female athletes, *Am J Sports Med* 26(5):614-619, 1998.
33. Liu SH, Al-Shaikh RA, Panossian V, et al: Primary immunolocalization of estrogen and progesterone target cells in the human anterior cruciate ligament, *J Orthop Res* 14(4):526-533, 1996.
34. Griffin JW, Tooms RE, VanderZwaag R, et al: Eccentric muscle performance of elbow and knee muscle groups in untrained men and women, *Med Sci Sports Exerc* 25(8):936-944, 1993.
35. Baratta R, Solomonow M, Zhou BH, et al: Muscular coactivation. The role of the antagonist musculature in maintaining knee stability, *Am J Sports Med* 16(2):113-122, 1988.
36. Huston LJ, Wojtys EM: Neuromuscular performance characteristics in elite female athletes, *Am J Sports Med* 24(4):427-436, 1996.
37. Ireland ML, Gaudette M, Crook S: ACL injuries in the female athlete, *J Sports Rehabil* 6:97-110, 1997.
38. Loudon JK, Jenkins W, Loudon KL: The relationship between static posture and ACL injury in female athletes, *J Orthop Sports Phys Ther* 24(2):91-97, 1996.
39. van Ingen Schenau GJ, Bobbert MF, Rozendal RH: The unique action of the biarticular muscles in explosive movements, *Int J Sports Med* 5:301-305, 1984.
40. Stacoff A, Kaelin X, Stuessi E: Impact in landing after a volleyball block. In de Groot G et al, editors: *Biomechanics XI*, Amsterdam, 1988, Free University Press.
41. Hewett TE, Stroupe AL, Nance TA, et al: Plyometric training in female athletes. Decreased impact forces and increased hamstring torques, *Am J Sports Med* 24(6):765-773, 1996.
42. Draganich LF, Vahey JW: An in vitro study of anterior cruciate ligament strain induced by quadriceps and hamstrings forces, *J Orthop Res* 8(1):57-63, 1990.
43. Hirokawa S, Solomonow M, Lu Y, et al: Anterior-posterior and rotational displacement of the tibia elicited by quadriceps contraction, *Am J Sports Med* 20(3):299-306, 1992.
44. Renstrom P, Arms SW, Stanwyck TS, et al: Strain within the anterior cruciate ligament during hamstring and quadriceps activity, *Am J Sports Med* 14(1):83-87, 1986.
45. Wilk KE, Escamilla RF, Fleisig GS, et al: A comparison of tibiofemoral joint forces and electromyographic activity during open and closed kinetic chain exercises, *Am J Sports Med* 24(4):518-527, 1996 .
46. Hewett TE, Myer GD, Noyes FR: Identification of athletes with increased valgus knee displacement during landing: effects of gender and training. 26th Annual Meeting of the American Orthopaedic Society for Sports Medicine, 2000.
47. Lehnhard RA, Lehnhard HR, Young R, et al: Monitoring injuries on a college soccer team: the effect of strength training, *J Strength Cond Res* 10(2):115-119, 1996.
48. Heidt RS Jr, Sweeterman LM, Carlonas RL, et al: Avoidance of soccer injuries with preseason conditioning, *Am J Sports Med* 28(5):659-662, 2000.
49. Hejna WF, Rosenberg A, Buturusis D, et al: The prevention of sports injuries in high school students through strength training, *Natl Strength Coaches Assoc J* 4(1):28-31, 1982.
50. Kraemer WJ: A series of studies—the physiological basis for strength training in American football: fact over philosophy, *J Strength Cond Res* 11(3):131-142, 1997.
51. Kraemer WJ, Duncan ND, Volek JS: Resistance training and elite athletes: adaptations and program considerations, *J Orthop Sports Phys Ther* 28(2):110-119, 1998.
52. Kraemer WJ, Hakkinen K, Triplett-McBride NT, et al: Physiological changes with periodized resistance training in women tennis players, *Med Sci Sports Exerc* 35(1):157-168, 2003.
53. Lloyd DG, Buchanan TS: Strategies of muscular support of varus and valgus isometric loads at the human knee, *J Biomech* 1257-:(10)34 2001 ,1267.
54. Lloyd DG: Rationale for training programs to reduce anterior cruciate ligament injuries in Australian football, *J Orthop Sports Phys Ther* 31(11):645-654, 661 (discussion), 2001.
55. Cahill BR, Griffith EH: Effect of preseason conditioning on the incidence and severity of high school football knee injuries, *Am J Sports Med* 6(4):180-184, 1978.
56. Malinzak RA, Colby SM, Kirkendall DT, et al: A comparison of knee joint motion patterns between men and women in selected athletic tasks, *Clin Biomech* 16(5):438-445, 2001.

Chapter 2

1. Hey Groves EW: Operation for the repair of the crucial ligaments, *Lancet* 2: 674-675, 1917.
2. Hey Groves EW: The crucial ligaments of the knee joint. Their function, rupture, and operative treatment of the same, *Br J Surg*,17:505-515 1919.
3. Trickey EL: Injuries to the posterior cruciate ligament. Diagnosis and treatment of early injuries and reconstruction of late instability, *Clin Orthop* 147:76-81, 1980.
4. Andrews J, Soffer S: Posterior cruciate reconstruction with bonepatellar tendon-bone autografts. In Scott WN, editor: *The knee*, Baltimore, 1994, Williams & Wilkins.
5. Augustine RW: The unstable knee, *Am J Surg* 92:380, 1956.
6. Clancy WG, Narechania RG, Rosenberg TD, et al: Anterior and posterior cruciate ligament reconstruction in rhesus monkeys. A histological microangiographic and biochemical analysis, *J Bone Joint Surg Am* 63:1270-1284, 1981.
7. Clancy WG Jr, Nelson DA, Reider B, Narechania RG: Anterior cruciate ligament reconstruction using one third of the patellar ligament augmented by extra-articular tendon transfers, *J Bone Joint Surg Am* 64:352-359, 1982.
8. Schulte KR, Harner CD: Management of isolated posterior cruciate ligament injuries, *Op Tech Orthop* 5: 270, 1995.
9. Swenson TM, Harner CD, Fu FH: Arthroscopic posterior cruciate ligament reconstruction with allograft, *Sports Med Arthrosc Rev*2:120-1994 ,128.
10. Parolie JM, Bergfeld JA: Long-term results of nonoperative treatment of isolated posterior cruciate ligament injuries in the athlete, *Am J Sports Med* 14:35-38, 1986.
11. Arnoczky SP, Tarvin GB, Marshall JL: Anterior cruciate ligament replacement using patellar tendon. An evaluation of graft revascularization in the dog, *J Bone Joint Surg Am* 64:217-224, 1982.
12. Yasuda K, Tomiyama Y, Ohkoshi Y, Kaneda K: Arthroscopic observations of autogeneic quadriceps and patellar tendon grafts after anterior cruciate ligament reconstruction of the knee, *Clin Orthop* 246:217-224, 1989.
13. Jackson DW, Grood ES, Goldstein JD, et al: A comparison of patellar tendon autograft and allograft used for anterior cruciate ligament reconstruction in the goat model, *Am J Sports Med* 21:176-1993 ,185 .
14. Rodeo SA, Arnoczky SP, Torzilli PA, et al: Tendon-healing in a bone tunnel. A biomechanical and histological study in the dog, *J Bone Joint Surg Am* 75:1795-1803, 1993.
15. Tomita F, Yasuda K, Mikami S, et al: Comparisons of intraosseous graft healing between the doubled flexor tendon graft and the bonepatellar tendon-bone graft in the anterior cruciate ligament reconstruction, *Arthroscopy* 17:461-476, 2001.
16. Daniel DM, Stone ML, Barnett P, Sachs R: Use of the quadriceps active test to diagnose posterior cruciate-ligament disruption and measure posterior laxity of the knee, *J Bone Joint Surg* 70-A:386-391, 1988.
17. Giffi n JR, Vogrin TM, Zantop T, et al: Effects of increasing tibial slope on the biomechanics of the knee, *Am J Sports Med* 32:376-,382 2004.
18. Ninos JC, Irrgang JJ, Burdett R, Weiss JR: Electromyographic analysis of the squat performed in self-selected lower extremity neutral rotation and 30° of lower extremity turn-out from the selfselected neutral position, *J Orthop Sports Phys Ther* 25:307-315,1997 .
19. Grood ES, Suntay WJ, Noyes FR, Butler DI: Biomechanics of the knee-extension exercise, *J Bone Joint Surg* 66A:725-733, 1984.
20. Hungerford DS, Barry M: Biomechanics of the patellofemoral joint, *Clin Orthop* 144:9-15, 1979.
21. Wojtys EM, Huston LJ, Taylor P, Bastian SD: Neuromuscular adaptations in isokinetic, isotonic, and agility training programs, *Am J Sports Med* 24:187-192, 1996.
22. Ihara H, Nakayama A: Dynamic joint control training for knee ligament injuries, *Am J Sports Med* 14:309-315, 1986.
23. Beard DJ, Dodd CAF, Trundle HR, Simpson AHRW: Proprioception enhancement for anterior cruciate ligament deficiency, *J Bone Joint Surg Br* 76:654-659, 1994.
24. Fitzgerald GK, Axe MJ, Snyder-Mackler L: The efficacy of perturbation training in non-operative anterior cruciate ligament rehabilitation programs for physically active, *Phys Ther* 80:128- 140, 2000.

Chapter 3

1. Dehaven KE, Litner DM: Athletic injuries: comparison by age, sport and gender, *Am J Sports Med* 14:218-224, 1986.
2. Woo SLY, Inoue M, McGuirk-Burleson E, et al: Treatment of the medial collateral ligament injury: structure and function of the canine knee in response to differing treatment regimens, *Am J Sports Med* 15:22-29, 1987.
3. Miyasaka KC, Daniel DM, Stone ML, Hirschman P: The incidence of knee injuries in the general population, *Am J Knee Surg*1991 ,4:3-8 .
4. Slocum DB, Larson RL, James SI: Late reconstruction of ligamentous injuries of the medial compartment of the knee, *Clin Orthop* 100:23-55, 1974.
5. Warren LF, Marshall JL, Girgis F: The prime static stabilizer of the medial side of the knee, *J Bone Joint Surg* 56A:665-670,1974 .
6. Grood ES, Noyes FR, Butler DL, et al: Ligamentous and capsular restraints preventing straight medial and lateral laxity in intact human cadaver knees, *J Bone Joint Surg* 63A:1257-1269, 1981.
7. Sullivan DJ, Levy IM, Shesikier S, et al: Medial restraints to anterior-posterior motion of the knee, *J Bone Joint Surg* 6A:930-1984 ,939 .
8. Seebacher JR, Inglis AE, Marshall JL, et al: The structure of the posterolateral aspect of the knee, *J Bone Joint Surg* 64A:536,1982 .
9. Wilk KE, Clancy WG, Andrews JR, Fox GM: Assessment and treatment of medial capsular injuries. In Ellenbecker TS: *Knee ligament rehabilitation*, Philadelphia, 2000, Churchill Livingstone.
10. Tipton CM, Mathies RD, Martin RK: Influence of age and sex on strength of bone-ligament junctions in knee joints of rats, *J Bone Joint Surg* 60A:230-234, 1978.
11. Woo SLY, Orlando CA, Gomez MA, et al: Tensile properties of the medial collateral ligament as a function of age, *J Orthop Res*,4:133-136 1986.

12. Noyes FR, Grood ES: The strength of the anterior cruciate ligament in humans and rhesus monkeys: age-related and species-related changes, *J Bone Joint Surg* 58A:1074, 1976.
13. DeLee JC, Riley MB, Rockwood CA: Acute straight lateral instability of the knee, *Am J Sports Med* 11:404-411, 1983.
14. Irrgang JJ, Safran MR, Fu FH: The knee: ligamentous and meniscal injuries. In Zachazewski JE, Magee DJ, Quillen WS: *Athletic injuries and rehabilitation*, Philadelphia, 1996, Saunders.
15. Slocum DB, James SL, Larson RL, Singer KM: Clinical test for anterolateral rotatory instability of the knee, *Clin Orthop* 118:63-69, 1976.
16. Hughston J, Andrews J, Cross M, Moschi A: Classification of knee ligament instabilities. Part I. The medial compartment and cruciate ligaments, *J Bone Joint Surg* 58A:2, 1976.
17. Veltri DM, Warren RF: Anatomy, biomechanics, and physical findings in posterolateral knee instability, *Clin Sports Med*, 599-614:(3)13 1994.
18. Oster A, Okhum K, Hulgaard J: Operative treatment of rupture in the medial collateral ligament, *Acta Orthop Scand* 42(5):439, 1971.
19. Palmer I: On the injuries to the ligaments of the knee joint: a clinical study, *Acta Chir Scand Suppl* 53, 1938.
20. O'Donoghue DH: Surgical treatment of fresh injuries to the major ligaments of the knee, *J Bone Joint Surg* 32A:721-737, 1950.
21. O'Donoghue DH: An analysis of end results of surgical treatment of major injuries of the ligaments of the knee, *J Bone Joint Surg* 37 A:1-12, 1955.
22. Godshall RW, Hansen CA: The classification, treatment, and follow-up evaluation of medial collateral ligament injuries of the knee, *J Bone Joint Surg* 56A:1316, 1974.
23. England RL: Repair of the ligaments about the knee, *Orthop Clin North Am* 7:195-205, 1976.
24. Hughston JC, Eilers AF: The role of the posterior oblique ligament in repairs of the acute medial (collateral) ligament tears of the knee, *J Bone Joint Surg* 55A:923-940, 1973.
25. Fetto JF, Marshall JL: Medial collateral ligament injuries of the knee: a rationale for treatment, *Clin Orthop* 132:206-218, 1978.
26. Sanberg R, Balkfors B, Nilsson B, Westlin N: Operative versus non-operative treatment of recent injuries to the ligaments of the knee, *J Bone Joint Surg* 69A:1120-1126, 1987.
27. Indelicato PA: Non-operative treatment of complete tears of the medial collateral ligament of the knee, *J Bone Joint Surg* 65A:323-329 1983.
28. Weiss JA, Woo SLY, Ohland KJ, et al: Evaluation of a new injury model to study medial collateral ligament healing: primary repair versus nonoperative treatment, *J Orthop Res* 9:516-528, 1991.
29. Hart DP, Dahners LE: Healing of the medial collateral ligament in rats, *J Bone Joint Surg* 69A:1194-1199, 1987.
30. Mok DW, Good C: Non-operative management of acute grade III medial collateral ligament injury of the knee: a prospective study, *Injury* 20(5):277-280, 1989.
31. Elsasser JC, Reynolds FC, Omohundro JR: The non-operative treatment of collateral ligament injuries of the knee in professional football players, *J Bone Joint Surg* 56A:1185-1190, 1974.

Chapter 4

1. Gupte CM, Smith A, McDermott ID, et al: Menisiofemoral ligaments revisited. Anatomical study, age correlation and clinical implications, *J Bone Joint Surg Br* 84:846-851, 2002.
2. Yamamoto M, Hirohata K: Anatomical study on the menisiofemoral ligaments of the knee, *Kobe J Med Sci* 37:209-226, 1991.
3. Rath E, Richmond JC: The menisci: basic science and advances in treatment, *Br J Sports Med* 34:252-257, 2000.
4. Seneviratne A, Rodeo S: Identifying and managing meniscal injuries, *J Musculoskelet Med* 10:690-697, 2000.
5. Rodkey WG: Basic biology of the meniscus and response to injury, *Instr Course Lect* 49:189-193, 2000.
6. Stone KR, Rodkey WG, Webber R, et al: Meniscal regeneration with copolymeric collagen scaffolds. In vitro and in vivo studies evaluated clinically, histologically, and biochemically, *Am J Sports Med* 20:104-111, 1992.
7. Bluteau G, Labourdette L, Ronziere M, et al: Type X collagen in rabbit and human meniscus, *Osteoarthritis Cartilage* 7:498-501, 1999.
8. Bessette GC: The meniscus, *Orthopedics* 15:35-42, 1992.
9. Arnoczky SP, Warren RF: Microvasculature of the human meniscus, *Am J Sports Med* 10:90-95, 1982.
10. Cooper DE, Arnoczky SP, Warren RF: Arthroscopic meniscal repair, *Clin Sports Med* 9:589-607, 1990.
11. Mine T, Kimura M, Sakka A, Kawai S: Innervation of nociceptors in the menisci of the knee joint: an immunohistochemical study, *Arch Orthop Trauma Surg* 120:201-204, 2000.
12. Rodeo SA, Warren RF: Meniscal repair using the outside-to-inside technique, *Clin Sports Med* 15:469-481, 1996.
13. Henning CE, Lynch MA: Current concepts of meniscal function and pathology, *Clin Sports Med* 4:259-265, 1985.
14. Thompson WO, Fu FH: The meniscus in the cruciate-deficient knee, *Clin Sports Med* 12:771-796, 1993.
15. Levy IM, Torzilli PA, Warren RF: The effect of medial meniscectomy on anterior-posterior motion of the knee, *J Bone Joint Surg Am* 64:883-888, 1982.
16. Negenbank WG, Fernandez-Madrid FR, Heilbrun LK, Teitge RA: Magnetic resonance imaging of meniscal degeneration in asymptomatic knees, *J Orthop Res* 8:311-320, 1990.
17. Seitz H, Schlenz I, Muller E, Vecsei V: Anterior instability of the knee despite an intensive rehabilitation program, *Clin Orthop* 328:159-196, 1996.
18. Shelbourne KD, Nitz PA: The O'Donoghue triad revisited: combined knee injuries involving anterior cruciate and medial collateral ligament tears, *Am J Sports Med* 19:474-477, 1991.
19. Smith JP III, Barrett GR: Medial and lateral meniscal tear patterns in anterior cruciate ligament-deficient knees. A prospective analysis of 575 tears, *Am J Sports Med* 29:415-419, 2001.
20. Arnoczky SP, Warren RF: The microvasculature of the meniscus and its response to injury. An experimental study in the dog, *Am J Sports Med* 11:131-141, 1983.

21. Arnoczky SP, Warren RF, Kaplan N: Meniscal remodeling following partial meniscectomy—an experimental study in the dog, *Arthroscopy* 1:247-252, 1985.
22. Higuchi H, Kimura M, Shirakura K, et al: Factors affecting longterm results after arthroscopic partial meniscectomy, *Clin Orthop*377:161-2000 ,168.
23. Stone KR, Rodkey WG, Webber RJ, et al: Future directions. Collagen- based prostheses for meniscal regeneration, *Clin Orthop*252:129-1990 ,135.
24. Hede A, Hempel-Poulsen S, Jensen JS: Symptoms and level of sports activity in patients awaiting arthroscopy for meniscal lesions of the knee, *J Bone Joint Surg Am* 72:550-552, 1990.
25. Habata T, Ishimura M, Ohgushi H, et al: Axial alignment of the lower limb in patients with isolated meniscal tear, *J Orthop Sci*,3:85-89 1998.
26. Magee T, Shapiro M, Williams D: MR accuracy and arthroscopic incidence of meniscal radial tears, *Skelet Radiol* 31:686-689,2002 .
27. van Trommel MF, Potter HG, Ernberg LA: The use of noncontrast magnetic resonance imaging in evaluating meniscal repair: comparison with conventional arthrography, *Arthroscopy* 14:2-8, 1998.
28. De Smet AA, Norris MA, Yandow DR, et al: MR diagnosis of meniscal tears of the knee: importance of high signal in the meniscus that extends to the surface, *Am J Roentgenol* 161:101-107,1993 .
29. Freiburger RH: Arthrography of the knee for diagnosis of torn meniscus, *J Sports Med* 1:24, 1972.
30. Ekstrom JE: Arthrography. Where does it fit in? *Clin Sports Med*1990 ,9:561-566 .
31. Shelbourne KD, Johnson GE: Locked bucket-handle meniscal tears in knees with chronic anterior cruciate ligament deficiency, *Am J Sports Med*1993 ,21:779-782 .
32. Weiss CB, Lundberg M, Hamberg P, et al: Non-operative treatment of meniscal tears, *J Bone Joint Surg Am* 71:811-822,1989 .
33. Stone KR: Current and future directions for meniscus repair and replacement, *Clin Orthop* 367(suppl):S273-S280, 1999.
34. Paessler HH, Franke K, Gladstone J: Moritz Katzenstein: the father of meniscus repair surgery, *Arthroscopy* 19:39e, 2003.
35. Fairbank TJ: Knee joint changes after meniscectomy, *J Bone Joint Surg Br* 30B:664-670, 1948.

Chapter 5

1. Enad JG, Loomis LL: Primary patellar tendon repair and early mobilization: results in an active-duty population, *J South Orthop Assoc* 10(1):17-23, 2001.
2. Shah M, Jooma N: Simultaneous bilateral quadriceps tendon rupture while playing basketball, *Br J Sports Med* 36:152-153,2002 .
3. Hsu K, Wang K, Ho W, Hsu RW: Traumatic patellar tendon ruptures: a follow-up study of primary repair and neutralization wire, *J Trauma* 36:658-660, 1994.
4. McGrory JE: Disruption of the extensor mechanism of the knee, *J Emerg Med* 24(2):163-168, 2003.
5. Ho HM, Lee WKE: Traumatic bilateral concurrent patellar tendon rupture: an alternative method, *Knee Surg Sports Trauma Arthrosc* 11(2):105-111, 2003.
6. Kelly DW, Carter VS, Jobe FW, Kerlan RK: Patellar and quadriceps tendon ruptures—jumper’s knee, *Am J Sports Med* 12(5):375-1984 ,380 .
7. Kuechle DK, Stuart MJ: Isolated rupture of the patellar tendon in athletes, *Am J Sports Med* 22(5):692-695, 1994.
8. Podesta L, Sherman MF, Bonamo JR: Bilateral simultaneous rupture of the infrapatellar tendon in a recreational athlete, *Am J Sports Med* 19(3):325-327, 1991.
9. Rose PS, Frassica FJ: Atraumatic bilateral patellar tendon rupture, *J Bone Joint Surg* 83A(9):1382-1386, 2001.
10. Shah M: Simultaneous bilateral rupture of the quadriceps tendons: analysis of risk factors and associations, *South Med J* 95(8):860-866 2002.
11. Whiting WC, Zernicke RF: *Biomechanics of musculoskeletal injury*, Champaign, IL, 1998, Human Kinetics.
12. Calvo E, Ferrer A, Robledo AG, et al: Bilateral simultaneous spontaneous quadriceps tendons rupture. A case report studied by magnetic resonance imaging, *Clin Imaging* 21:73-76, 1997.
13. Sandrey MA: Acute and chronic tendon injuries: factors affecting the healing response and treatment, *J Sport Rehabil* 12(1):70-91, 2003.
14. Kirkendall DT, Garrett WE: Function and biomechanics of tendons, *Scand J Med Sci Sports* 7:62-66, 1997.
15. Enad JG: Patella tendon ruptures, *South Med J* 92(6):563-566,1999 .
16. Ilan DI, Tejwani N, Keschner M, Leibman M: Quadriceps tendon rupture, *J Am Acad Orthop Surg* 11(3):192-200, 2003.
17. Kannus P, Jozsa L: Histopathological changes preceding spontaneous rupture of a tendon, *J Bone Joint Surg* 73A(10):1507-1525, 1991.
18. Bhole R, Johnson JC: Bilateral simultaneous spontaneous rupture of quadriceps tendon in a diabetic patient, *South Med J* 78(4):486,1985 .
19. Shah M: Simultaneous bilateral quadriceps tendon rupture in renal patients, *Clin Nephrol* 58(2):118-121, 2002.
20. Liow RYL, Tavares S: Bilateral rupture of the quadriceps tendon associated with anabolic steroids, *Br J Sports Med* 29(2):77-79,1995 .
21. Bhole R, Flynn JC, Marbury TC: Quadriceps tendon ruptures in uremia, *Clin Orthop* 195:200-206, 1985.
22. Clark SC, Jones MW, Choudhury RR, Smith E: Bilateral patellar tendon rupture secondary to repeated local steroid injections, *J Accident Emerg Med* 12:300-301, 1995.
23. Lombardi LJ, Cleri DJ, Epstein E: Bilateral spontaneous quadriceps tendon rupture in a patient with renal failure, *Orthopedics*187-:(2)18 1995 ,191.
24. Shah M: Outcomes in bilateral and simultaneous quadriceps tendon rupture, *Orthopedics* 26(8):797-798, 2003.
25. Kuo RS, Sonnabend DH: Simultaneous rupture of the patellar tendons bilaterally: case report and review of the literature, *J Trauma* 34(3):458-460, 1993.
26. Bhargava SP, Hynes MC, Dowell JK: Traumatic patella tendon rupture: early mobilization following surgical repair, *Injury*,76-79:(1)35 2004.
27. Scuderi GR: Quadriceps and patellar tendon disruptions. In Scott WN, editor: *The knee*, St Louis, 1994, Mosby.
28. Larson RV, Simonian PT: Semitendinosus augmentation of acute patellar tendon repair with immediate mobilization, *Am J Sports Med*

23(1):82-86, 1995.

29. Levy M, Goldstein J, Rosner M: A method of repair for quadriceps *Rehabil* 81(6):786-788, 2000.

40. DePalma MJ, Perkins RH: Patellar tendinosis: acute patellartendon rupture and jumper's knee, *Phys Sports Med* 32(5):4145,2004.

Chapter 6

1. Buckwalter JA, Mankin HJ: Articular cartilage I. Tissue design and chondrocyte-matrix interactions, *J Bone Joint Surg* 79A:600-1997, 611 .
2. Buckwalter JA, Mankin HJ: Articular cartilage II. Degeneration and osteoarthritis, repair, regeneration and transplantation, *J Bone Joint Surg* 79A:612-632, 1997.
3. Mankin HJ: The response of articular cartilage to mechanical injury, *J Bone Joint Surg* 64A:460-466, 1982.
4. Messner K: The long-term prognosis for severe damage to weightbearing cartilage in the knee. A 14-year clinical and radiographic follow-up in 28 young athletes, *Acta Orthop Scand* 67:165-168, 1996 .
5. O'Driscoll S: The healing and regeneration of articular cartilage, *J Bone Joint Surg* 80A:1795-1807, 1998.
6. Newman AP: Articular cartilage, *Am J Sports Med* 2:309-324, 1998 .
7. Sgagliione NA, Miniaci A, Gillogly SD, et al: Update on advanced surgical techniques in the treatment of traumatic focal articular cartilage lesions in the knee, *Arthroscopy* 18(suppl 2):9-32, 2002.
8. Mow VC, Ateshian GA, Ratcliffe A: Anatomic form and biomechanical properties of articular cartilage of the knee joint. In Finerman GAM, Noyes FR, editors: *Biology and biomechanics of the traumatized synovial joint: the knee as a model*. Rosemont, IL, 1992, American Academy of Orthopaedic Surgeons (AAOS).
9. Mow VC, Holmes MH, Lai WM, et al: Fluid transport and mechanical properties of articular cartilage: a review, *J Biomech* 1984, 17:377-394 .
10. Mow VC, Rosenwasser M: Articular cartilage: biomechanics. In Woo SL-Y, Buckwalter JA, editors: *Injury and repair of the musculoskeletal soft tissues*. Park Ridge, IL, 1988, AAOS.
11. Buckwalter JA: Effects of early motion on healing of musculoskeletal tissues, *Hand Clin* 12:13-24, 1996.
12. Walker JM: Pathomechanics and classification of cartilage lesions, facilitation of repair, *J Orthop Sports Phys Ther* 28:216-231, 1998.
13. Palmoski MJ, Colyer RA, Brandt KD: Joint motion in the absence of normal loading does not maintain normal articular cartilage, *Arthritis Rheum* 23:325-334, 1980.
14. Curl WW, Krome J, Gordon ES, et al: Cartilage injuries: a review of 31,516 knee arthroscopies, *Arthroscopy* 13:456-60, 1997.
15. Hjelle K, Ausigulen O, Muri R, et al: Full-thickness chondral defects: a prospective study of 1000 knee arthroscopies. Paper presented at Third International Cartilage Repair Society Symposium, Gothenburg, Sweden, April 27-29, 2000.
16. Terry GC, Flandry F, Van Manen JW, et al: Isolated chondral fractures of the knee, *Clin Orthop* 234:170-177, 1988.
17. Maffulli N, Binfield PM, King JB: Articular cartilage lesions in the symptomatic anterior cruciate ligament-deficient knee, *Arthroscopy* 19:685-690, 2003.
18. Oepfen RS, Connolly SA, Bencardino JT, et al: Acute injury of the articular cartilage and subchondral bone: a common but unrecognized lesion in the immature knee, *Am J Roentgenol* 182:111-117, 2004 .
19. Potter HG, Linklater JM, Allen AA, et al: Magnetic resonance imaging of articular cartilage in the knee. An evaluation with use of fast-spin-echo imaging, *J Bone Joint Surg Am* 80:1276-1284, 1998 .
20. Outerbridge RE: The etiology of chondromalacia patellae, *J Bone Joint Surg* 43B:752-767, 1961.
21. Jackson R, Marans H, Silver R: Arthroscopic treatment of degenerative arthritis of the knee, *J Bone Joint Surg* 70B:332, 1988 (abstract).
22. Harwin SF: Arthroscopic debridement for osteoarthritis of the knee: predictors of patient satisfaction, *Arthroscopy* 15:142-146, 1999 .
23. Pridie AH: The method of resurfacing osteoarthritic joints, *J Bone Joint Surg* 41B:618-623, 1959.
24. Johnson L: Arthroscopic abrasion arthroplasty historical and pathologic perspective: present status, *Arthroscopy* 2:54-69, 1986.
25. Steadman JR, Rodkey WG, Singleton SB, et al: Microfracture technique for full-thickness chondral defects: technique and clinical results, *Oper Tech Orthop* 7:300-304, 1997.
26. Shapiro F, Koide S, Glimcher MJ: Cell origin and differentiation in the repair of full-thickness defects of articular cartilage, *J Bone Joint Surg* 75A:532-553, 1993.
27. Gillogly SD, Voight M, Blackburn T: Treatment of articular cartilage defects of the knee with autologous chondrocyte implantation, *J Orthop Sports Phys Ther* 28:241-251, 1998.
28. Johnson L: Arthroscopic abrasion arthroplasty. In McGinty JB, editor: *Operative arthroscopy*, New York, 1991, Raven Press.
29. Bert J, Maschka K: The arthroscopic treatment of unicompartmental gonarthrosis: a five year follow-up study with abrasion arthroplasty plus arthroscopic debridement and arthroscopic debridement alone, *Arthroplasty* 5:25-32, 1989.
30. Friedman M, Berasi C, et al: Preliminary results with abrasion arthroplasty in the osteoarthritic knee, *Clin Orthop* 182:200-205, 1984 .

Chapter 7

1. Bryant WM: *Wound healing*, Reading, MA, 1977, CIBA Pharmaceutical Co.
2. Daly TJ: The repair phase of wound healing—re-epithelialization and contraction. In Kloth LC, McCulloh JM, Feeder JA, editors: *Wound healing: alternatives in management*, Philadelphia, 1990, FA Davis.
3. Martinez-Hernandez A, Amenta PS: Basic concepts in wound healing. In Leadbetter WB, Buckwalter JA, Gordon SL, editors: *Sports-induced inflammation*, Park Ridge, IL, 1990, American Academy of Orthopaedic Surgeons.
4. Kloth LC, Miller KH: The inflammatory response to wounding. In Kloth LC, McCulloh JM, Feeder JA, editors: *Wound healing: alternatives in management*, Philadelphia, 1990, FA Davis.
5. Cotran RS, Kumar V, Robbins SL: *Robbins pathologic basis of disease*, ed 4, Philadelphia, 1989, Saunders.
6. Stevens A, Lowe J: *Pathology*, St Louis, 1995, Mosby.
7. *Dorland's Illustrated Medical Dictionary*, ed 27, Philadelphia, 1988, Saunders.

8. Knight KL: Cold as a modifier of sports-induced inflammation. In Leadbetter WB, Buckwalter JA, Gordon SL, editors: *Sports-induced inflammation*, Park Ridge, IL, 1990, American Academy of Orthopaedic Surgeons.
9. Hettinga DL: Inflammatory response of synovial joint structures. In Gould JA III, editor: *Orthopaedic and sports physical therapy*, ed 2, St Louis, 1990, Mosby.
10. Reed B: Wound healing and the use of thermal agents. In Michlovitz SL, editor: *Thermal agents in rehabilitation*, ed 3, Philadelphia, 1996, FA Davis.
11. Junqueira LC, Carneiro J, Kelly RO: *Basic histology*, ed 8, Norwalk, CT, 1995, Appleton & Lange.
12. Groner J, Weeks PM: Healing of hard and soft tissues of the hand. In Strickland JW, Rettig AC: *Hand injuries in athletes*, Philadelphia, 1992, Saunders.
13. Price H: Connective tissue in wound healing. In Kloth LC, McCulloh JM, Feeder JA, editors: *Wound healing: alternatives in management*, Philadelphia, 1990, FA Davis.