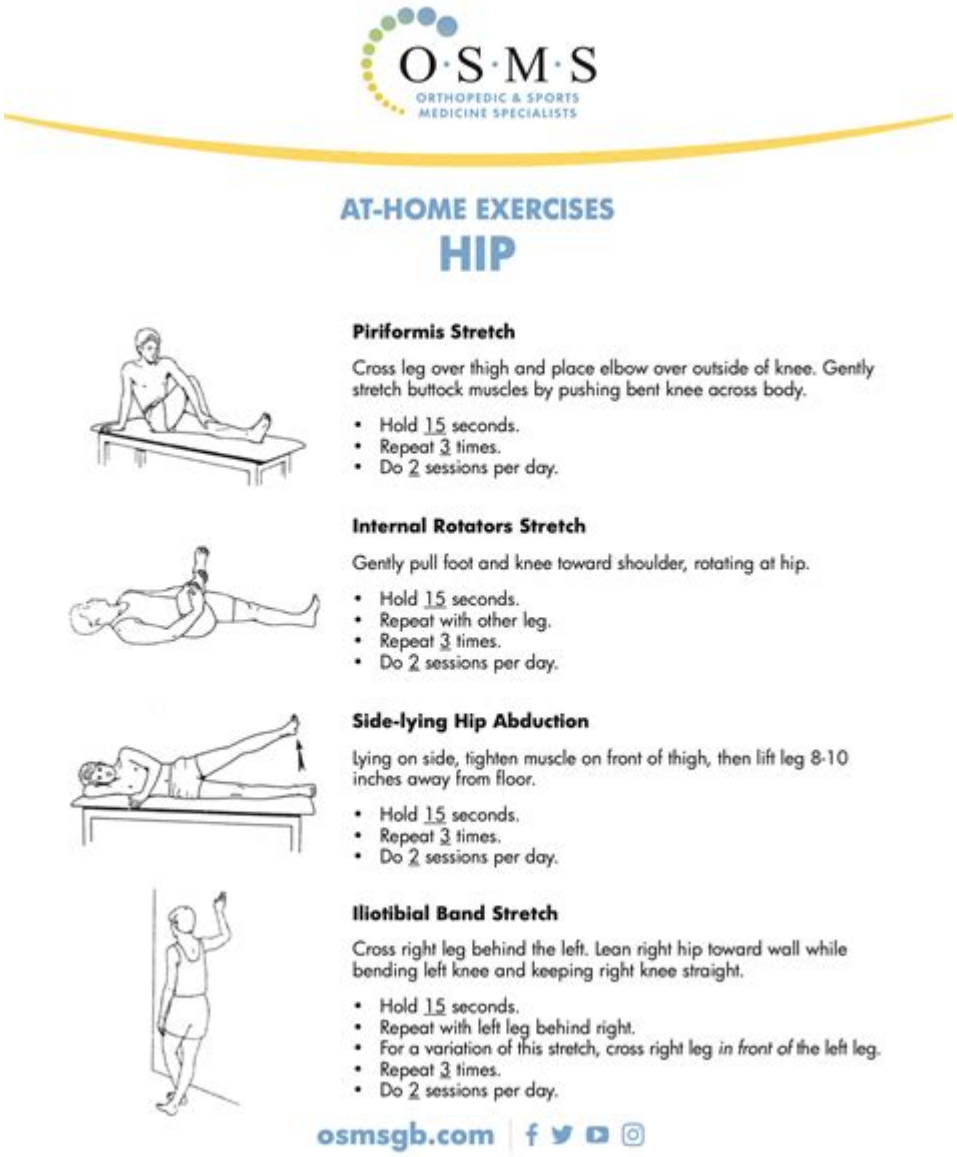
Femur Fracture Physical Therapy Protocol



Femur Fracture Physical Therapy Protocol: A Comprehensive Guide to Recovery

A femur fracture, or broken thigh bone, is a serious injury requiring extensive rehabilitation. The road to recovery is long and challenging, but with the right physical therapy protocol, you can regain strength, mobility, and a high quality of life. This comprehensive guide delves into the intricacies of a typical femur fracture physical therapy protocol, outlining the phases of recovery and the exercises involved. We'll explore the timeline, potential challenges, and how to maximize your results, empowering you to actively participate in your healing journey.

Understanding the Stages of Femur Fracture Physical Therapy

The recovery process following a femur fracture is divided into distinct phases, each with specific goals and exercises. A personalized protocol will be designed by your physical therapist based on your individual needs, the type of fracture, and your overall health. However, a general framework typically includes:

Phase 1: The Immediate Post-Operative Phase (Weeks 1-6)

This initial phase focuses on pain management, minimizing swelling, and preventing complications. Activities are generally limited to:

Range of Motion Exercises: Passive range of motion (PROM) exercises, where the therapist moves your leg, are crucial to prevent stiffness and contractures. Active assisted range of motion (AAROM) might be introduced as tolerated.
Edema Management: Techniques like elevation, ice packs, and compression bandages help reduce swelling.
Pain Control: Your therapist will work with you to manage pain using various modalities, including heat, cold, and electrical stimulation.
Weight Bearing Restrictions: Strict adherence to weight-bearing restrictions prescribed by your surgeon is paramount. This might involve using crutches, a walker, or a wheelchair.

Phase 2: Early Mobilization and Weight Bearing (Weeks 6-12)

As healing progresses, the focus shifts towards regaining mobility and weight-bearing capacity. This phase may include:

Progressive Weight Bearing: Gradually increasing weight-bearing on the affected leg, as guided by your physician and therapist.
Strengthening Exercises: Isometric exercises (muscle contractions without movement) are initially employed, followed by isotonic exercises (movement against resistance). Focus will be on strengthening the quadriceps, hamstrings, and hip muscles.
Gait Training: Practice walking with assistive devices, gradually progressing to reduced support as strength and balance improve.
Functional Activities: Simple activities like transferring from bed to chair are practiced to build functional strength.

Phase 3: Advanced Strengthening and Functional Training (Weeks 12-24 and beyond)

This phase aims to restore full functional capacity and improve overall fitness.

Advanced Strengthening: More challenging resistance exercises, including weight training and plyometrics, are incorporated.
Proprioceptive Training: Exercises focusing on balance and coordination are crucial to improve stability and prevent falls.
Functional Activities: More complex activities, such as stair climbing and sports-specific exercises, are gradually introduced.
Return to Activities: A phased return to normal activities, including work and recreational pursuits, will be planned and supervised by your therapist.

Potential Challenges and Considerations

The recovery process can be unpredictable, and some individuals may face challenges. These can include:

Pain Management: Persistent pain can hinder progress. Your physical therapist will work with you to develop effective pain management strategies.
Swelling: Swelling can persist for several months. Continued use of edema management techniques may be required.
Muscle Weakness: Significant muscle atrophy can occur. Dedicated strengthening is crucial to rebuild muscle mass.
Scar Tissue Formation: Scar tissue can restrict movement. Techniques like massage and mobilization may be used to address this.
Delayed Healing: Factors such as age, overall health, and the severity of the fracture can impact healing time.

Maximizing Your Results

To optimize your recovery, consider these strategies:

Active Participation: Active engagement in your therapy sessions is crucial.
Home Exercise Program: Regularly perform the prescribed home exercises.
Compliance with Instructions: Adhere to weight-bearing restrictions and other instructions from your healthcare team.
Proper Nutrition: Maintain a balanced diet to support healing and muscle growth.
Consistent Communication: Communicate openly with your physical therapist about any concerns or challenges.

Conclusion

Recovering from a femur fracture requires patience, dedication, and a comprehensive physical therapy protocol. By understanding the different phases of recovery and actively participating in your treatment, you can significantly improve your chances of regaining full mobility and function. Remember that consistent communication with your healthcare team is key to a successful recovery.

FAQs

1. How long does femur fracture physical therapy typically last? The duration varies greatly depending on the severity of the fracture, individual healing rate, and patient compliance. It can range from several months to a year or more.

2. What type of exercises can I expect during physical therapy? Exercises will progress from passive range of motion to active assisted range of motion, strengthening exercises (isometric, isotonic), balance exercises, and functional activities.

3. Will I need surgery after a femur fracture? Surgical intervention is often necessary for complex fractures, but some fractures can be treated non-surgically with casting or bracing. Your orthopedic surgeon will determine the best approach.

4. Can I return to sports after a femur fracture? A gradual return to sports is possible with proper rehabilitation. The timing depends on the severity of the injury and the individual's progress.

5. What if I experience increased pain during physical therapy? Increased pain is a sign to stop the exercise and inform your physical therapist. They can adjust the intensity or modify the exercises to avoid further injury.

femur fracture physical therapy protocol: Guide to Physical Therapist Practice American Physical Therapy Association (1921-), 2001-01-01 This text guides patterns of practice; improves quality of care; promotes appropriate use of health care services; and explains physical therapist practice to insurers, policymakers, and other health care professionals. This edition continues to be a resource for both daily practice and professional education.

femur fracture physical therapy protocol: Orthogeriatrics Paolo Falaschi, 2021 This new open access edition supported by the Fragility Fracture Network aims at giving the widest possible dissemination on fragility fracture (especially hip fracture) management and notably in countries where this expertise is sorely needed. It has been extensively revised and updated by the experts of this network to provide a unique and reliable content in one single volume. Throughout the book, attention is given to the difficult question of how to provide best practice in countries where the discipline of geriatric medicine is not well established and resources for secondary prevention are scarce. The revised and updated chapters on the epidemiology of hip fractures, osteoporosis, sarcopenia, surgery, anaesthesia, medical management of frailty, peri-operative complications, rehabilitation and nursing are supplemented by six new chapters. These include an overview of the multidisciplinary approach to fragility fractures and new contributions on pre-hospital care, treatment in the emergency room, falls prevention, nutrition and systems for audit. The reader will have an exhaustive overview and will gain essential, practical knowledge on how best to manage fractures in elderly patients and how to develop clinical systems that do so reliably.

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decreased life expectancy. There is a need for coordinated, multi-disciplinary models of care for secondary fracture prevention based on the increasing evidence that such models make a difference. There is also a need to promote and facilitate high quality, evidence-based effective care to those who suffer a fragility fracture with a focus on the best outcomes for recovery, rehabilitation and secondary prevention of further fracture. The care community has to understand better the experience of fragility fracture from the perspective of the patient so that direct improvements in care can be based on the perspectives of the users. This book supports these needs by providing a comprehensive approach to nursing practice in fragility fracture care.

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femur fracture physical therapy protocol: Total Knee Arthroplasty James Alan Rand, 1993 This comprehensive reference on total knee arthroplasty describes all surgical techniques and prosthetic designs for primary and revision arthroplasty, discusses every aspect of patient selection, preoperative planning, and intraoperative and postoperative care.

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An in-depth understanding of a comprehensive approach to the management of radius fractures and their complications. The authors -- world renowned experts in the field -- present practical, clinical information from their extensive experience in the treatment of these fractures. Topics include the authors' classification as well as decision- making and tactics in the conservative and operative management of all types of radius fractures. Topics covered include: bending fractures of the metaphysis, shearing and compression fractures of the joint surface, avulsion fractures, radio-carpal fracture and dislocation, combined fractures, high velocity injury and malunions. In addition, chapters deal with surgical techniques and approach as well as with complications. With over 500 illustrations, this is the definitive volume on these challenging fractures, their complete treatment, and the management of complications.

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femur fracture physical therapy protocol: Patient Safety in Surgery Philip F. Stahel, Cyril Mauffrey, 2014-08-20 In general, surgeons strive to achieve excellent results and ideal patient outcomes, however, this noble task is frequently failed. For patients, surgical complications are analogous to “friendly fire” in wartime. Both scenarios imply that harm is unintentionally done by somebody whose aim was to help. Interestingly, adverse events resulting from surgical interventions are more frequently related to system errors and a communication breakdown among providers, rather than to the imminent threat of the surgical blade “gone wrong”. Patient Safety in Surgery aims to increase the safety and quality of care for patients undergoing surgical procedures in all fields of surgery. Patient Safety in Surgery, covers all aspects related to patient safety in surgery, including pertinent issues of interest to surgeons, medical trainees (students, residents, and fellows), nurses, anaesthesiologists, patients, patient families, advocacy groups, and medicolegal experts.

femur fracture physical therapy protocol: Standards for the Management of Open Fractures Simon Eccles, Selvadurai Nayagam, 2020 Standards for the Management of Open Fractures provides an evidence-based approach for the management of open fractures, focussing on lower limb injuries. It builds on and expands the NICE Guidelines to provide a practical approach with supporting evidence. The new edition has been extensively updated and expanded to include key aspects of management, ranging from setting up an orthoplastic service, through to dealing with the bone and soft tissue injures, complications such as infection, and patient rehabilitation and psychological care. The book is primarily aimed at trainee plastic, orthopaedic and trauma surgeons (particularly for expanding knowledge and examination revision) but would also appeal to established surgeons to improve patient care. Standards for the Management of Open Fractures is an open access title. It is available to read and download as a free PDF version on Oxford Medicine Online. It has been made available under a Creative Commons Attribution-Non Commercial No Derivatives 4.0 International licence.

femur fracture physical therapy protocol: Extremity Trauma James P. Kennedy, 1992

femur fracture physical therapy protocol: Bone Stress Injuries Adam S. Tenforde, MD, Michael Fredericson, MD, 2021-07-17 “This book gives a nice summary of the current state of diagnosis, treatment, and prevention of bone stress injuries. It is particularly useful for sports medicine fellows and residents with an interest in athletes and active patients. ---Doody's Review Service, 3 stars Bone stress injuries are commonly seen in athletes and active individuals across a full spectrum of physical activity, age, and gender. While most overuse injuries can be addressed

through non-operative care, injuries may progress to full fractures that require surgery if misdiagnosed or not correctly managed. Written by leaders in sports medicine including physical medicine and rehabilitation, orthopaedics, endocrinology and allied health professionals of biomechanics, physical therapy and dietetics, Bone Stress Injuries offers state-of-the-art guidelines and up-to-date science and terminology to practitioners. Using a holistic approach to understand the management of bone stress injuries, this book highlights specific considerations by injury, gender, and risk factor to ensure that a comprehensive treatment plan can be developed to optimize bone health, neuromuscular re-education, gait mechanics, and injury prevention. Organized into four parts, opening chapters cover the general need-to-know topics, including clinical history, imaging, and risk factors including biological and biomechanical factors. The book proceeds anatomically through the body from upper extremity to foot and ankle injuries, with each chapter underscoring diagnostic and treatment strategies specific to that region. Chapters dedicated to special populations discuss the differences in injury evaluation and management according to age, gender, and military background. Final chapters review the prevention of injuries and examine both common and novel treatment strategies, such as medications, nutrition, gait retraining, orthobiologics, and other interventions. Invaluable in its scope and approach, Bone Stress Injuries is the go-to resource for sports medicine physicians, physiatrists, and primary care providers who manage the care of athletes and individuals leading active lifestyles. Key Features: Promotes evidence-based practice for diagnosis, treatment, and prevention of bone stress injuries Covers specific anatomy that is prone to bone stress injuries with dedicated chapters on upper and lower extremities, pelvis and hip, spine, and foot and ankle Considers evaluation and management differences according to specific populations of pediatric, male, female, and military personnel Discusses emerging strategies to treat bone stress injuries, such as gait retraining, orthobiologics, and other non-pharmacological treatments

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students.

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femur fracture physical therapy protocol: Surgical Treatment of Femoral Neck Fractures Orlin Filipov, M.d., 2019-03-27 While arthroplasty is the preferred treatment for most elderly patients with displaced femoral neck fractures, internal fixation is the treatment of choice in the majority of patients below the age of 65 as a joint-preserving procedure. The osteosynthesis of fractures of the femoral neck in the elderly has been partly abandoned during the last years due to the poor clinical outcomes following the conventional fixation with parallel screws or DHS. Based on clinical evidence and laboratory testing, the novel method of biplane double-supported screw fixation (BDSF) offers much better fixation stability, reflecting in excellent clinical outcomes. With its innovative biomechanic principle, the BDSF method provides supreme stability for cannulated screw fixation, achieving up to 44% higher axial fixation strength in vitro, and a rate of bone union reaching up to 96.6% in clinical practice, which is much higher than the conventional parallel screw fixation data.The method of BDSF provides supreme stability by buttressing two out of three medially diverging cannulated screws on the inferior femoral neck cortex and supporting the steeper inferior screw on the posterior femoral neck cortex. The two calcar screws are oriented in different coronal inclinations intended to provide constant fixation strength during different patient activities and load directions. Biomechanically, the most effective component is the inferior screw placed at an obtuse angle and supported on a large area along the inferior and posterior cortex of the femoral neck following its spiral anterior curve.Given the clinical outcomes, BDSF is the perfect technique for femoral neck fracture fixation, as the fracture healing rate is high at 96% with this approach. Therefore, BDSF is not only a treatment alternative to conventional fixation, but also a much better procedure. Thus, BDSF should be routinely applied, and conventional fixation gradually abandoned in clinical practice (this has been the approach in our institution over the last ten years).This book describes the full surgical technique of the method of BDSF for femoral neck fracture osteosynthesis; quality criteria and surgical recommendations for successful BDSF implementation, according to the vast clinical experience of ten years with this highly effective method.A novel surgical approach for hip arthroplasty is described in this book. The current trends aimed at decreasing operative trauma and blood loss have been not entirely satisfied with respect to most of the standard approaches for hip arthroplasty. These surgeries are often associated with considerable blood loss and the necessity for restricting patients activities in the postoperative period due to impaired joint stability and risk of dislocations.This book describes the full surgical technique of the novel anatomical direct lateral approach for hip arthroplasty, aimed at decreasing blood loss, minimizing operative trauma, and optimizing joint stability. This technique is associated with minimal blood loss and high joint stability. Patients are allowed to perform activities within the normal range of motion and without any special restrictions in the early postoperative period.This book describes also the history of internal fixation in femoral neck fractures, as well as the biomechanics of femoral neck fracture osteosynthesis and the role of the implants.

femur fracture physical therapy protocol: Fractures of the Acetabulum E. Letournel, R. Judet, 2013-06-29 It has been a pleasure to comply with requests to publish this book in English. During the intervening years, there has been little to add to our views as to the best management of acetabular fractures, but an additional chapter has been incorporated comprising recent findings in our patients and slight changes in emphasis on the indications for operations. Additionally, having recognised that one of the greatest difficulties in this method of treatment lies in the pre-operative assessment of the standard radiographs, we have prepared a short series of radiographs which the reader may find advantageous for study. We are grateful to Mr. Reginald Eison who has translated and revised the French edition. Considerable alteration of the text and the general presen tation was necessary in order to make the material palatable in English. Our thanks are due to our new publishers, Springer-Verlag, for their keen interest and skill. E. LETOURNEL R. JUDET Preface to the French Edition It is a long time since we first attempted surgical treatment of fractures of the

acetabulum accompanied by displacement, with the aim of restoring perfect articulation. Such treatment demands an exact reconstitution of the anatomy of the acetabulum and pelvic bone. This volume comprises an account of our efforts to assess the place of open reduction and internal fixation of displaced fractures of the acetabulum. The principal aim is simple: the perfect restoration of the articular surface and the associated bony architecture.

femur fracture physical therapy protocol: Peripheral Nerve Issues after Orthopedic Surgery Christopher J. Dy, David M. Brogan, Eric R. Wagner, 2021-11-15 Peripheral nerve issues are potential sequalae of orthopedic surgery, even after cases in which technically excellent surgery was performed. These injuries can impede the expected recovery of function after the primary surgery. Given the manifold challenges associated with recovery of peripheral nerve injuries, this book is designed as a multidisciplinary guide to the diagnosis, prognostication and treatment of peripheral nerve issues after common orthopedic surgeries. Beginning with an overview of nerve compression, injury and regeneration, as well as a presentation of the current diagnostic and imaging modalities for peripheral nerve injuries, this unique text is organized by anatomic region and by type of procedure performed. Topics covered include shoulder and elbow arthroplasty and arthroscopy, fractures of the hand and wrist, hip preservation surgery, total knee replacement, open surgery of the foot and ankle, lumbosacral myeloradiculopathy, and more. Each chapter is authored by both a subspecialty surgeon who routinely performs the surgeries described and a subspecialized hand/peripheral nerve surgeon with experience in evaluating and treating nerve issues after that particular injury. Emphasis is placed on multidisciplinary team approaches, patient counseling, and technical aspects of surgical treatment. Generously illustrated and written by experts in the field, Peripheral Nerve Issues after Orthopedic Surgery is a truly interdisciplinary resource for orthopedic, plastic, hand and trauma surgeons, physiatrists, trainees, and all professionals evaluating and managing postoperative peripheral nerve issues.

femur fracture physical therapy protocol: Joint Arthroplasty Shinichi Imura, Makoto Wada, Hironori Omori, 2012-12-06 The introduction of total joint arthroplasty throughout the world has contributed manifold benefits to patients who suffer from joint diseases. Concurrently, however, there has been an increase in revision surgery. Many orthopedic surgeons agree that durability of prostheses is an eternal problem. In particular, periprosthetic osteolysis recently has been identified as one of the serious problems affecting prosthetic dura bility. To improve durability, osteolysis and many other problems must be investi gated and solved both experimentally and clinically with respect to such aspects as prosthetic material, design, and biological and biomechanical behavior. This book comprises 37 papers that were presented by orthopedic surgeons and biomedical engineers at the 28th Annual Meeting of the Japanese Society for Replace ment Arthroplasty, held in March 1998 in Kanazawa, Japan. The volume is thus a compilation of the latest knowledge about the pathogenesis and reduction of osteolysis and wear, newly developed total hip prostheses, and other current topics of total knee arthroplasty. We earnestly hope that this book will be of benefit to clinicians and researchers, and that it will contribute to the creation of more durable total joint prostheses in the future. SHINICHI IMURA v Contents Preface ..... ' .. .. V List of Contributors. . . . . XI . . . . . Part 1 Wear and Pathogenesis of Osteolysis Friction and Wear of Artificial Joints: A Historical Review N. AKAMATSU ..... , 3 Matrix Degradation in Osteoclastic Bone Resorption Under Pathological Conditions .

femur fracture physical therapy protocol: Play Forever Kevin R. Stone, 2021-12-14 Why are some octogenarians competitive athletes while others struggle to walk up the stairs? It isn't luck. It's orthopaedic science. If you're tired of doctors telling you that an injury will prevent you from playing the sports you enjoy, you'll love Dr. Kevin R. Stone's Play Forever. All great athletes get injured. Only the best of them use those injuries to come back to their sport better-fitter, faster, and stronger than before. Through Dr. Stone's revolutionary approach to sports medicine, you'll discover how injuries can lead to a lifetime of high-performance fitness and athleticism. Learn how the musculoskeletal system can be repaired through cutting-edge therapies, then honed and

strengthened through semiannual fitness tests, preseason education and training programs, and regular in-season tune-ups. Backed by scientific outcome studies on orthopaedic treatments and implants, Play Forever will become your go-to health and fitness source, helping you play the sport you love to age 100 and beyond.

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femur fracture physical therapy protocol: *Pelvic Ring Fractures* Axel Gänsslen, Jan Lindahl, Stephan Grechenig, Bernd Füchtmeier, 2020-11-25 This book provides in-depth coverage of all aspects of pelvic ring fractures and their management. The opening chapters supply essential information on surgical anatomy, biomechanics, classification, clinical evaluation, radiological diagnostics, and emergency and acute management. The various operative techniques, including navigation techniques, that have been established and standardized over the past two decades are then presented in a step-by-step approach. Readers will find guidance on surgical indications, choice of approaches, reduction and fixation strategies, complication management, and optimization of long-term results. Specific treatment concepts are described for age-specific fractures, including pediatric and geriatric injuries, and secondary reconstructions. Pelvic ring fractures represent challenging injuries, especially when they present with concomitant hemodynamic instability. This book will help trauma and orthopaedic surgeons at all levels of experience to achieve the primary treatment aim of anatomic restoration of the bony pelvis to preserve biomechanical stability and avoid malunion with resulting clinical impairments.

femur fracture physical therapy protocol: Intramedullary Nailing Pol M. Rommens, Martin H. Hessmann, 2015-01-12 This book contributes to the enhancement of fundamental and practical knowledge in the treatment of fractures, healing disturbances and bone disorders with intramedullary nailing. It promotes this biological and mechanical outstanding technique for appropriate indications and ameliorate the standard of care for those patients, who can profit from intramedullary nailing. Orthopedic trauma surgeons from all over the world, who work in the most different circumstances and with the most diverse technical and logistical equipment, will find this book to be an essential resource and guide for their daily practice with intramedullary nailing.

femur fracture physical therapy protocol: Fragility Fractures of the Pelvis Pol Maria Rommens, Alexander Hofmann, 2017-12-19 Thanks to an increasing life expectancy of our populations the number of elderly persons is steadily growing and will continue to do so. Among these, the rate of persons with illnesses and degenerative diseases is significant. The prevalence of osteoporosis is especially high in elderly women and leads to typical fracture patterns. Hip fractures, proximal humerus fractures, distal radius fractures and fractures of the vertebral column are the most common. In the last decade, we are confronted with a sharp increase of fragility fractures of the pelvis. Until now, there is no consensus on how to identify and classify these lesions and there are no guidelines for treatment and after treatment. In particular, there is no common view on which patients need an operative treatment and which technique of osteosynthesis should be used. This book fills the gap in available literature and gives a state of the art guide to the treatment of fragility fractures of the pelvis. With the sharp increase of these fractures and the lacking consensus,

Fragility Fractures of the Pelvis will become indispensable for the physicians who take care of elderly patients with this pathology. Written by a team of expert opinion leaders, the aim of this book is to contribute to the scientific discussion in this area and to help provide the optimal care for these patients.

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Tornetta, III, William Ricci, Charles M. Court-Brown, Margaret M. McQueen, 2019-02-22 This exhaustive reference includes new chapters and pedagogical features, as well as—for the first time—content on managing fragility factures. To facilitate fast, easy absorption of the material, this edition has been streamlined and now includes more tables, charts, and treatment algorithms than ever before. Experts in their field share their experiences and offer insights and guidance on the latest technical developments for common orthopaedic procedures, including their preferred treatment options.

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