

and prosthetic perspectives—for people with unilateral or bilateral amputations, including recent and future developments. A new chapter on the Krukenberg procedure is an excellent addition to the atlas. Physical therapists will benefit from understanding the use of the muscles of the upper limb in controlling the pincer-like extremity that results from this procedure. Chapter 22 will be of particular interest to physical therapists, because it covers the pre- and postprosthetic training of the patient in vocational and avocational activities. Many examples are provided in all the chapters.

Section III covers the lower limb. Twenty-four chapters provide the reader with information on normal gait and gait with an amputation, energy expenditure issues associated with people with amputations, surgical and prosthetic management, sports and recreation possibilities, and research in lower-limb prosthetics. Chapters 29 through 32 provide an excellent review of the kinematics and kinetics of normal gait and gait for people with transtibial and transfemoral amputation and the energy expenditure of walking for people with an amputation. Prosthetic components and their muscular control are considered within each phase of the gait cycle. The lack of details in the studies of energy expenditure in people with a unilateral amputation (no distinction of the age of the subjects, causes of amputation, use of assistive devices, prosthetic fit, and experience) reinforce the need for more research addressing these issues.

Reference charts and tables in many of the chapters will be beneficial resources for students, new graduates, and experienced practitioners. Chapter 48, centering on physical therapy, provides the reader with a wealth of exercises and activities for the rehabilitation process. There are several excellent figures that cover exercises and activities and wrapping techniques with elastic bandages for people with transtibial and transfemoral amputations. Both recent graduates and seasoned clinicians will find these figures helpful as quick references when developing rehabilitation programs for patients with lower-limb amputations.

Physical therapists will also be attracted to chapter 51 on sports and recreation. It contains a table outlining the 5 basic steps of running with an amputation and

a table with specific instructions for the golfer. Although the focus of this chapter is swimming, golfing, and cycling, there is valuable information for preparing people with amputations for recreational and competitive sports, including a table with tips for coaching the novice athlete. The last chapter in this section, chapter 52, "Research in Lower Limb Prosthetics," is lacking in recent studies on prosthetic development and use. There are only a few references from the past 10 years. All other references were published before 1995. This chapter leaves the reader wanting more current information than is provided.

Section IV considers management issues, such as osseointegration in transfemoral amputees, musculoskeletal complications, chronic pain issues, and psychological adaptation to amputation. Chapter 53, "Future Developments: Osseointegration in Transfemoral Amputees," includes reports on both the positive and negative outcomes of various clinical trials in this field.

The final section of this atlas is devoted to pediatrics. The reader is reminded that the child is not a small adult, but has particular issues that need to be addressed, including growth management and tolerance for gadgets. Developmental kinesiology and general prosthetic considerations are thoroughly covered. Chapter 63 includes a useful reference figure with the normal developmental milestones in infants and young children.

The final chapter in this section explores the need for surgical modification of residual limbs for fitting prostheses, for self-suspension, and for end-weight bearing; issues associated with terminal overgrowth; and the potential advantages of lengthening residual limbs for function.

Physical therapists who see patients with amputations and limb deficiencies will find valuable information in this atlas on pre- and postoperative care, prosthetic components and designs, and prosthetic training. The multidisciplinary approach provides valuable information on developmental, physiological, psychosocial, pharmacological, and surgical aspects of treatment. The chapters on prosthetic components and management and occupational therapy and physical therapy are particularly pertinent. The case studies

provided in several chapters are an excellent adjunct to applying the content in a clinical context. The book liberally uses photographs and illustrations of patients before and after their amputation and prosthetics. The chapters with tables and figures provide quick reference points for both the novice and experienced clinician. Overall, I would recommend this atlas as a reference source for occupational therapists and physical therapists and students.

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Special Needs, Special Horses: A Guide to the Benefits of Therapeutic Riding

Scott N. Denton, TX 76203, University of North Texas Press, 2005, paperback, 226 pp, illus, ISBN: 1-57441-192-6, \$14.95.

Equine-assisted activities (EAA) is the term preferred by the North American Riding for the Handicapped Association (NARHA) for interactions between people with special needs and horses, whether the individual is mounted on the horse or standing on the ground. The purpose of this book is to provide information, in simple terms, about procedures, techniques, and benefits of EAA. The author's intent is to acquaint prospective clients with horseback riding programs, particularly children who have never ridden or have never been around horses before. Most of the information is compiled from 3 main sources: (1) the author's interviews with instructors, therapists who utilize EAA, and others involved in riding programs, (2) research from the NARHA on the use of the horse's motion as a treatment tool, and (3) the author's own experience as a volunteer assisting participants in a riding program. Information obtained through other personal communications with parents, therapists, instructors, and NARHA members is referenced throughout the book.

The book is divided into 2 parts. Part I, "Therapeutic Riding and Activities," has 14 chapters that cover the basics and benefits of therapeutic riding programs and activities. In chapter 1, the author defines the various types of treatments available that involve horses, including hippotherapy, equine-facilitated psychotherapy, equine-facilitated experiential learning, and recreational riding. Hippotherapy uses the horse's movement as a treatment tool to improve neuromuscular function in the rider. Physical therapists, occupational therapists, and speech-language therapists who have received training in the principles of hippotherapy administer this treatment. Equine-facilitated psychotherapy (EFP) is a form of experiential psychotherapy that is administered by mental health professionals. People with psychosocial and mental health issues, according to the author, benefit from this therapy. Equine-facilitated psychotherapy denotes an ongoing therapeutic relationship with established treatment goals developed by the therapist with the client. It promotes personal exploration of feelings and behaviors, and allows for clinical interpretation. Equine-facilitated experiential learning (EFEL) complements EFP. People participate in specially designed interactive experiences that may promote psychosocial healing and growth by promoting pro-social attitudes through caregiving experiences. These experiences include hands-on activities working with a horse and learning to care for the animal in a natural environment. Recreational riding is used to enhance quality of life through physical and emotional stimulation while the client learns horsemanship skills. Recreational riding occurs under the direction of a certified therapeutic riding instructor.

Chapter 2 summarizes the potential physical, psychological, cognitive, and educational benefits of therapeutic riding. This chapter includes a section on the benefits of riding for the older population, as well. Chapter 3 presents a brief synopsis of the origin and history of therapeutic horseback riding and the development of national organizations dedicated to therapeutic riding. Readers will find contact information for the NARHA and the Canadian Therapeutic Riding Association in this chapter.

Chapter 4 introduces the reader to the instructors, therapists, and volunteers who work with and assist the clients. This chapter also explores the roles and training

requirements of instructors and therapists in the program, and the value that trained instructors add to the riding experience. The author states that physical therapists, occupational therapists, and speech-language therapists who conduct hippotherapy must receive training in the classic principles of hippotherapy, equine movement, and equine psychology, and should be experienced in horsemanship. Chapter 5 describes the roles that riding center owners and volunteers play in supporting the programs, while chapter 6 is devoted specifically to the horses used in the riding programs. The author describes the qualities, temperament, and training these horses must have in order to participate in therapeutic riding activities.

Chapter 7 summarizes common procedures for initiating and conducting a person's riding program. The author first refers readers to NARHA's "Precautions and Contraindications" for information on conditions for which riding may be contraindicated, which can be found on the NARHA Web site at www.narha.org. Unfortunately, the author fails to list or discuss any of these conditions, so the reader is left wondering what those conditions might be. However, the chapter provides directions for mounting and dismounting the horse, and types of adaptive equipment that can be used. The roles and qualifica-

tions of the leader, sidewalkers, and backriders also are discussed.

In chapters 8, 9, and 12, the author uses individual profiles to highlight features of recreational riding, hippotherapy, and private riding program sessions. Chapter 10 focuses on alternative activities to riding, such as vaulting and carriage driving. A typical vaulting class and lesson are described. According to the author, carriage driving can be a valuable alternative for those who cannot or do not want to ride, or who simply prefer it over riding. Chapter 11 lists a variety of events for riders interested in competitive equestrian sports.

The topic of chapter 13 is starting a new NARHA center. The author uses interviews with the program directors of 2 NARHA centers to illustrate how some programs were started and built. The final chapter in part I, "Helping Troubled Youth," features a riding program specifically designed to help children with emotional and behavioral difficulties.

Part II also contains of 14 chapters. Thirteen of these are individual profiles of children and adults with varying diagnoses and levels of disability who participate in therapeutic riding programs. Each profile is written much like a short story or a feature story in a newspaper, and is told through

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interviews with parents, instructors, or the clients themselves. Their diagnoses include intrauterine stroke, cerebral palsy, transverse myelitis, Parkinson disease, sensory integrative dysfunction, multiple sclerosis, shaken baby syndrome, spinal cord injuries, sensory damage, infantile strokes from a possible reaction DPT immunization, infantile seizures, Down syndrome, and autism. In the final chapter, "Miracles and Research," the author extols the benefits of therapeutic riding but recognizes the need for additional research to support its efficacy as a treatment modality.

The author does not reference specific content in the book with research studies, but there is an appendix that includes a sample list of research studies that support the efficacy of therapeutic horseback riding as a treatment modality for a variety of conditions. The list of studies draws from a wide variety of literature, including some foreign language journals. The appendix also includes the author's reference notes on her personal interviews, a glossary of terms, a short bibliography, and a list of personal communications.

This book is very simply written and easy to read. The chapters are as few as 2 and no more than 8 pages long. Part I presents a nice overview of the variety of therapeutic riding activities that are available. The profiles in part II complement part I, but do not add any new information. There is just enough information, without being overly technical, to make the book worthwhile for the person who is unfamiliar with therapeutic riding activities. Because the content is very basic, however, it is not likely to be of particular benefit to physical therapists looking for more detailed information on practice in this setting. Parents, friends, or relatives of children and adults with disabilities may find the book useful as an introduction to therapeutic riding activities.

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Examination of Musculoskeletal Injuries, ed 2

Shultz SJ, Houghlum PA, Perrin DH. Champaign, IL 61825, Human Kinetics, 2005, hardcover, 720 pp, illus, ISBN: 0-7360-5138-4, \$69.

The second edition of this text replaces the previous title, *Assessment of Athletic Injuries*. The additions include 10 chapters and expanded coverage of general evaluation techniques for goniometric measurement, manual muscle testing, upper- and lower-quarter screens, posture, and gait. It is part of the Athletic Training Education Series published by Human Kinetics. Written for athletic training students, this text also includes a companion instructor guide, a test bank, and a presentation package. Although not of interest to most clinicians and not available for review, these additional items make this text, as well as the other texts available in the series, an attractive package to those in an academic environment.

The text is organized into 3 parts: "Principles of Examination," "Region-Specific Examination Strategies," and "Recognition of General Medical Conditions." Part I starts with the basics, terminology, and classifications. Chapters 3 to 9 cover the elements of an examination. Chapter 10 uniquely applies these elements across 3 levels of acuity: on-site, acute, and clinical.

In part II, the principles of examination are applied to specific body regions. In addition to the major joints and spine, the thorax and abdomen are covered. The chapters in this part cover functional anatomy, tests, injury examination strategies, and learning aids for each region. Most of the descriptions of tests include illustrations. The tests chosen are well represented, but the validity of each test is not addressed. Each chapter contains a list of references and additional resources for further information on the specific body region. These lists, however, are not complete and do not reflect current evidence-based practice. For example, in chapter 12, "Shoulder and Arm," only 9 references are listed, and not one is more recent than 2001.

The remainder of the text is dedicated to general medical conditions. This is the shortest part, and is again divided by body part or system. The format in this section departs from the rest of the text, in that

the medical conditions are only briefly described so that they might be recognized, but not evaluated.

Readers should not expect to find language consistent with the *Guide to Physical Therapist Practice*. It is clear that this text is written by and for athletic trainers, with the NATA's 2004 Role Delineation study serving as a guide to content. Terminology has been changed in this edition to reflect the emergence of athletic trainers in more nontraditional settings. It is easy to see why this text may be found in training programs for athletic training students. Each chapter offers objectives, a summary, and questions that promote critical thinking. Clinicians who are involved in clinical education or have athletic trainers on staff also could use this text as a reference. Hospital-based clinics that utilize outreach programs also would benefit from using this text for reference and staff education. It is likely that the clinic-based, experienced orthopedic physical therapist already has other texts with similar information.

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Joint Structure and Function: A Comprehensive Analysis, ed 4

Levangie PK, Norkin CC, eds. Philadelphia, PA 19103, FA Davis Co, 2005, hardcover, 588 pp, illus, ISBN 0-8036-1191-9, \$54.95.

Joint Structure and Function is a work that has stood the test of time. In this edition, the editors use new technologies, current evidence, the experience of colleagues, and a more integrated approach to facilitate the preparation of future health care practitioners who wish to understand human kinesiology and pathokinesiology. For example, changes in size, layout, and a 2-color format have improved the images and the readability. Line drawings have been added and enhanced with the use of digital technology, and there is a greater variety of image options, including photographs, medical imaging, and other 3-dimensional computer outputs.

Recognizing the difficulty of remaining current in all areas, the editors utilized