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Review of: Orthotics and Prosthetics in Rehabilitation, 2nd ed.

Authors: Lusardi, M.M. and Neisen, C.C.

St. Louis, MO: Elsevier Inc.; 2007. (928 pages; price: \$99.95)

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REVIEW

Allied health students working in rehabilitation will be exposed to individuals who have limb deficiencies and may benefit from prosthetics or orthotics. Orthotics and Prosthetics in Rehabilitation is a text which provides a comprehensive resource for students and clinicians. The text is well organized and presents very detailed topics in an easy to read format. Forty-two individuals combine to author its 33 chapters. The authors have a variety of professional backgrounds including physical therapy, occupational therapy, orthotics, prosthetics, and medicine. Over 72 case examples are spread throughout the 33 chapters, which serve as an ideal supplement to the materials presented.

ORGANIZATION

The book is organized into three parts. Part I consists of eight chapters and builds baseline knowledge. Topics covered in this part include: the multidisciplinary approach, materials and technology, pathological gait, aging and activity tolerance, motor learning and control, evidence-based approach, principles influencing design, and footwear. Fourteen case examples are provided in this section.

Part II contains 11 chapters and covers topics related to orthotics in rehabilitation. Three of the chapters discuss specific types of orthoses including functional foot orthoses, ankle-foot orthoses, knee-ankle-foot orthoses, and hip-knee-ankle-foot orthoses. The remaining chapters in this section cover the uses of orthoses in special situations. Chapters cover neuromuscular impairment, knee instability and pain, congenital, developmental, and trauma related musculoskeletal impairment, spinal dysfunction and instability, scoliosis, hand dysfunction, management of burns and adaptive seating. Twenty-nine case examples are provided in this section.

Part III contains 14 chapters and covers topics related to prosthetics in rehabilitation. This section contains chapters providing background information including: etiology of amputations, conservative management of the high-risk foot, and amputation surgeries of the lower limb. The remaining nine chapters are devoted to upper and lower limb prosthesis and rehabilitations. The section includes chapters on prosthetic feet and management of partial foot and symes amputations. The chapters which deal with transtibial and transfemoral prostheses are followed respectively by chapters covering rehabilitation of persons with transtibial and transfemoral amputations. Prosthetic options for persons with high-level and bilateral amputations and children with limb deficiencies are covered in separate chapters. The final two chapters cover prosthetic options and rehabilitation for persons with upper extremity amputations. Part III provides 29 case examples, which provide a valuable learning resource.

CASE EXAMPLES AND TABLES

The case examples, tables, and figures provide valuable resources for the material presented. Some of the tables need to be reworked to appropriately convey the material presented in the text. An example of this is figure 1-5, which attempts to show the multidisciplinary approach of eight disciplines but actually portrays each discipline only interacting with two other disciplines.

SUMMARY

Although this book appears to be geared toward the practice of physical therapy, it will be a valuable resource for any course in prosthetics and orthotics. As with most texts aimed at the physical therapy audience, references are made to the Guide to Physical Therapy Practice. The book also includes an entire chapter devoted to evidence-based approach to orthotic and prosthetic rehabilitation.