Lower-Limb Prosthetics and Orthotics: Clinical Concepts

Editors: Joan E. Edelstein and Alex Moroz


DESCRIPTION: Lower-Limb Prosthetics and Orthotics: Clinical Concepts provides an extensive overview about lower-limb prosthetics and orthotics. It encompasses a wide range, including a summary of normal and pathologic gait, gait analysis with lower-limb prostheses, detailed exploration of the care of patients with lower-limb amputation, lower-limb biomechanics, clinical applications, as well as prosthetic and orthotic designs and components.

PURPOSE: The goal of the book, as stated in the preface, is to present the broad range of lower-limb prostheses and orthoses, ranging from relatively simple devices to sophisticated computerized models. The authors hope to inspire broader thinking about clinical management and a deeper understanding of rehabilitation so that patients may achieve the highest level of function and well being.


AUDIENCE: The book is written for clinicians in the fields of physical medicine and rehabilitation, orthopedics, vascular surgery, physical therapy, and occupational therapy.

ASSESSMENT: This is a useful reference tool in the literature written about lower-limb prosthetics and orthotics. It fully covers essential information across a range of transtibial and transfemoral prostheses, components, biomechanics, evaluation, and gait analysis. Furthermore, principles of orthotic design, including their purposes, means of increasing the wearer’s comfort, advantages and drawbacks of a wide range of contemporary materials and other design considerations are established. The book concludes with a detailed discussion of orthotic management in patients having musculoskeletal and neuromuscular disorders, and with an extended presentation of both prostheses and orthoses in children. To my opinion, I feel that this book will successfully fulfill the scarce information in the literature about lower-limb prosthetics and orthotics.

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