CONTENTS

Preface Barbara Pieper

Overview: Acute and Chronic Wounds

JoAnne D. Whitney

Knowledge of normal wound healing and the changes associated with chronic wounds have advanced significantly. Distinct characteristics identified through basic and clinical studies are found in nonhealing wounds, including bacterial and growth factor imbalances, increased inflammatory responses, and proteolytic forces that tip the balance toward tissue degradation rather than repair. This article describes the alterations that reduce healing and that also have important implications for the management of chronic wounds and presents a focus for future developments in wound therapy.

Microbiology of Chronic Leg and Pressure Ulcers: Clinical Significance and Implications for Treatment John R. Ebright

This article discusses the use of topical antimicrobial agents for promoting healing in clinically uninfected wounds. Chronic pressure and leg ulcers are predictably colonized by multiple microorganisms including anaerobic and aerobic bacteria. In most instances, these organisms are clinically irrelevant and do not warrant antibiotic treatment. Topical or systemic antibodies are indicated for the treatment of patients with invasive infection and before ulcer closure, if quantitative tissue culture is positive. However, treating patients with topical antimicrobial agents for clinically uninfected but slowly healing wounds cannot be recommended at this time. Currently, evidence is insufficient to support routine use of antimicrobial agents for this purpose. xi

191

CONTENTS

Preface Barbara Pieper

Overview: Acute and Chronic Wounds JoAnne D. Whitney

Knowledge of normal wound healing and the changes associated with chronic wounds have advanced significantly. Distinct characteristics identified through basic and clinical studies are found in nonhealing wounds, including bacterial and growth factor imbalances, increased inflammatory responses, and proteolytic forces that tip the balance toward tissue degradation rather than repair. This article describes the alterations that reduce healing and that also have important implications for the management of chronic wounds and presents a focus for future developments in wound therapy.

Microbiology of Chronic Leg and Pressure Ulcers: Clinical Significance and Implications for Treatment John R. Ebright

This article discusses the use of topical antimicrobial agents for promoting healing in clinically uninfected wounds. Chronic pressure and leg ulcers are predictably colonized by multiple microorganisms including anaerobic and aerobic bacteria. In most instances, these organisms are clinically irrelevant and do not warrant antibiotic treatment. Topical or systemic antibodies are indicated for the treatment of patients with invasive infection and before ulcer closure, if quantitative tissue culture is positive. However, treating patients with topical antimicrobial agents for clinically uninfected but slowly healing wounds cannot be recommended at this time. Currently, evidence is insufficient to support routine use of antimicrobial agents for this purpose.

191

xi

Dressings and More: Guidelines for Topical Wound Management 217 Dorothy Doughty

This article presents the principles of topical therapy for wound care and provides guidelines for product selection based on the wound characteristics and response to treatment. The treatment choices that are discussed distinguish between passive support of a wound and a variety of active wound therapies designed to promote the repair process in wounds that fail to respond to standard therapy.

Wound Debridement: Therapeutic Options and Care Considerations

Janice M. Beitz

The understanding and implementation of wound debridement have assumed greater importance as preparation of the wound bed has become central to chronic wound care. Multiple methods of wound debridement are available, and evidence-based practice suggestions for appropriate usage are becoming increasingly available. Implications for up-to-date nursing care, patient education, and psychosocial, culturally competent interventions related to wound debridement are addressed in this article.

Support Surfaces: Beds, Mattresses, Overlays-Oh My!

Dianne Mackey

This article presents the current understanding of the scientific evidence relating to the efficacy of support surfaces and discusses the risk factors that contribute to skin breakdown. Different classes and features of support surfaces and the reimbursement structure across the care continuum are summarized. An update on the National Pressure Ulcer Advisory Panel's sponsored Support Surface Initiative is presented.

Facilitating Positive Outcomes in Older Adults with Wounds Nancy A. Stotts and Harriet W. Hopf

Aging affects wound healing and wound care in older persons. Biological changes that occur with age can result in delayed healing, increased wound infection, and a greater incidence of dehiscence. Physiologic changes in sensory processes, cognition, and functional status in the older person affect overall wound management. Clinicians need to understand how changes associated with aging impact the older person so they can facilitate optimal wound healing in this large and growing population.

251