Essential Microbiology for Wound Care

This is a short and very readable book on the microbiology and treatment of wounds. There is a single editor and multiple authors, all of whom are based in the United Kingdom. The organization of the book is logical, beginning with microbiology and pathogenesis in the first 6 chapters, then progressing to treatment and infection control in the next 4 chapters, followed by one chapter on areas of current and proposed investigation. The chapters are brief, about the right length to read during a coffee break. Most chapters could be read independently by anyone with basic medical knowledge, without reading the preceding material.

The material is arranged to be accessible and pleasing to the eye. Most chapters begin with a list of 4–7 short objectives. The sections in the text are brief and there are frequent, useful headings that make it easy to find what one wants. There are many figures, tables, and text boxes of various kinds (key point, fact, and definition) that break up the text, typically one or more of these per page. Most of the figures are in color and they are excellent, although a few complex figures on clinical care include text that is too small to read easily. The arrangement of the material might sound cluttered, but it is not and it added to the pleasure of reading this book. The number of references varies markedly between chapters, but the references are a reasonable mix of older and newer sources.

The organization of the book is sensible and most of the chapters are very good. The first 2 chapters, “Introduction” and “Microbiology: The Basics” are adequate, but they contain some small, distracting errors (eg, text misaligned in a table such that streptococci are indicated to be 10–12 µm in size), as well as a confusing section that does not adequately explain the differences between or components of “nonspecific” and “specific” immunity. Chapter 3, on the collection, transport, and laboratory processing of wound, tissue, and bone samples, is particularly good, with an excellent discussion of the appropriate methods of sample collection and transport for laboratory testing. Chapter 4, “Acute Versus Chronic Wounds: Microbiological Differences,” is more comprehensive than its modest title suggests. It includes a useful overview of the pathogenesis and risk factors for chronic wounds, as well as a discussion of the microbiology of different types of wounds. Chapter 5 includes sections about the most common pathogens that cause wound infections, including pathogenesis, manifestations, and some comments about treatment for each. Several uncommon pathogens that cause distinctive superficial infections (eg, erysipeloid and Buruli ulcer) are described very briefly, but the important points are there. Chapter 6 provides a very readable introduction to the biology of biofilms and a brief discussion of the role of biofilms in wound infections. There are also short sections on diagnosis and treatment as they might apply to biofilms in wound infections, but these sections reflect how little is known about these subjects. Chapter 7 includes discussion of conventional antimicrobial agents used in wound care (those orally and parenterally administered), but also a particularly useful discussion of topical agents and alternative agents such as honey, maggots, and botanicals. Chapter 8 is thoughtfully written and organizes the available dressings used in wound care by their uses (eg, reduction of microbial burden, debridement). Chapter 9 is focused on practical measures to prevent transmission of bacteria to patients with wound infections, and also has short sections on screening for healthcare-associated infections with methicillin-resistant Staphylococcus aureus and antibiotic-resistant gram-negative bacilli. Chapter 10 summarizes general strategies for wound care, and has a particularly good section and table on methods of debridement and cleaning of wounds. Chapter 11, on the future of wound care, describes areas in which there is active research or a need for research in developing improved methods of diagnosis and care for wounds.

I wish I had read this book when I was a medical student. The combination of clarity, brevity, and practicality will make it useful to medical trainees at all levels, as well as physicians and nurses who care for patients with wounds but who do not have specialized training in this subject.

Note
Potential conflict of interest. Author certifies no potential conflicts of interest. The author has submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Conflicts that the editors consider relevant to the content of the manuscript have been disclosed.

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