

# Chapter 175

## General

### Considerations of Bacterial Diseases

Noah Craft

#### REFERENCES

1. Grice EA et al: Topographical and temporal diversity of the human skin microbiome. *Science* **324**(5931):1190-1192, 2009
2. Gao Z et al: Substantial alterations of the cutaneous bacterial biota in psoriatic lesions. *PLoS One* **3**(7):e2719, 2008
3. Huang JT et al: Treatment of Staphylococcus aureus colonization in atopic dermatitis decreases disease severity. *Pediatrics* **123**(5):e808-e814, 2009
4. Bjornsdottir S et al: Risk factors for acute cellulitis of the lower limb: A prospective case-control study. *Clin Infect Dis* **41**(10):1416-1422, 2005
5. Leyden JJ, Stewart R, Kligman AM: Experimental infections with group A streptococci in humans. *J Invest Dermatol* **75**(2):196-201, 1980
6. Elek SD: Experimental staphylococcal infections in the skin of man. *Ann N Y Acad Sci* **65**(3):85-90, 1956
7. Aly R et al: Effect of prolonged occlusion on the microbial flora, pH, carbon dioxide and transepidermal water loss on human skin. *J Invest Dermatol* **71**(6):378-381, 1978
8. Elias PM: Defensive functions of the stratum corneum: Integrative aspects. In: *Skin Barrier*, edited by PM Elias, KR Feingold. New York: Taylor & Francis Group, 2006, p. 5
9. Bibel DJ et al: Antimicrobial activity of stratum corneum lipids from normal and essential fatty acid-deficient mice. *J Invest Dermatol* **92**(4):632-638, 1989
10. Costello EK et al: Bacterial community variation in human body habitats across space and time. *Science* **326**(5960):1694-1697, 2009
11. Izadpanah A, Gallo RL: Antimicrobial peptides. *J Am Acad Dermatol* **52**(3 Pt 1):381-390; quiz 91-92, 2005
12. Schaubert J, Gallo RL: Antimicrobial peptides and the skin immune defense system. *J Allergy Clin Immunol* **124**(3 Suppl 2):R13-R18, 2009
13. de Jongh GJ et al: High expression levels of keratinocyte antimicrobial proteins in psoriasis compared with atopic dermatitis. *J Invest Dermatol* **125**(6):1163-1173, 2005
14. Howell MD et al: Interleukin-10 downregulates anti-microbial peptide expression in atopic dermatitis. *J Invest Dermatol* **125**(4):738-745, 2005
15. McGirt LY, Beck LA: Innate immune defects in atopic dermatitis. *J Allergy Clin Immunol* **118**(1):202-208, 2006
16. Kang SS, Kauls LS, Gaspari AA: Toll-like receptors: Applications to dermatologic disease. *J Am Acad Dermatol* **54**(6):951-983; quiz 83-86, 2006
17. Hawlisch H, Kohl J: Complement and Toll-like receptors: Key regulators of adaptive immune responses. *Mol Immunol* **43**(1-2):13-21, 2006
18. Yang ES et al: Body site colonization in patients with community-associated methicillin-resistant Staphylococcus aureus and other types of S. aureus skin infections. *Clin Microbiol Infect* **16**(5):425-431, 2009
19. Rooijackers SH, van Kessel KP, van Strijp JA: Staphylococcal innate immune evasion. *Trends Microbiol* **13**(12):596-601, 2005
20. Iwatsuki K et al: Staphylococcal cutaneous infections: Invasion, evasion and aggression. *J Dermatol Sci* **42**(3):203-214, 2006
21. Foster TJ: Immune evasion by staphylococci. *Nat Rev Microbiol* **3**(12):948-958, 2005
22. Voyich JM et al: Insights into mechanisms used by Staphylococcus aureus to avoid destruction by human neutrophils. *J Immunol* **175**(6):3907-3919, 2005
23. Currie BJ: Group A streptococcal infections of the skin: Molecular advances but limited therapeutic progress. *Curr Opin Infect Dis* **19**(2):132-138, 2006
24. Buchanan JT et al: DNase expression allows the pathogen group A Streptococcus to escape killing in neutrophil extracellular traps. *Curr Biol* **16**(4):396-400, 2006

25. Girardin E et al: Tumor necrosis factor and interleukin-1 in the serum of children with severe infectious purpura. *N Engl J Med* **319**(7):397-400, 1988
26. Chira S, Miller LG: Staphylococcus aureus is the most common identified cause of cellulitis: A systematic review. *Epidemiol Infect* **138**(3):313-317, 2010
27. Gallagher TC, Strober BE: Cutaneous Bacillus anthracis infection. *N Engl J Med* **345**(22):1646-1647, 2001
28. Stamenkovic I, Lew PD: Early recognition of potentially fatal necrotizing fasciitis. The use of frozen-section biopsy. *N Engl J Med* **310**(26):1689-1693, 1984
29. Roche KJ, Chang MW, Lazarus H: Images in clinical medicine. Cutaneous anthrax infection. *N Engl J Med* **345**(22):1611, 2001
30. Andersson DI, Hughes D: Antibiotic resistance and its cost: Is it possible to reverse resistance? *Nat Rev Microbiol* **8**(4):260-271, 2010
31. Smack DP et al: Infection and allergy incidence in ambulatory surgery patients using white petrolatum vs bacitracin ointment. A randomized controlled trial. *JAMA* **276**(12):972-977, 1996