

Chapter 177

Gram-Positive Infections Associated with Toxin Production

Jeffrey B. Travers & Nico Mousdicas

REFERENCES

1. Dinges MM, Orwin PM, Schlievert PM: Exotoxins of *Staphylococcus aureus*. *Clin Microbiol Rev* **13**:16, 2000 [PMID: 10627489]
2. Ladhani S et al: Clinical, microbial, and biochemical aspects of the exfoliative toxins causing staphylococcal scalded-skin syndrome. *Clin Microbiol Rev* **12**:224, 1999 [PMID: 10194458]
3. Amagai M et al: Toxin in bullous impetigo and staphylococcal scalded-skin syndrome targets desmoglein I. *Nat Med* **6**:1275, 2000 [PMID: 11062541]
4. Yamasaki O et al: Clinical manifestations of staphylococcal scalded skin syndrome depend on serotypes of exfoliative toxins. *J Clin Microbiol* **43**:1890, 2005 [PMID: 15815014]
5. Rago JV et al: Mutational analysis of the superantigen staphylococcal exfoliative toxin A (ETA). *J Immunol* **164**:2207, 2000 [PMID: 10657676]
6. Plano LR et al: Recombinant *Staphylococcus aureus* exfoliative toxins are not bacterial superantigens. *Infect Immunol* **68**:3048, 2000 [PMID: 10769013]
7. Ritter von Rittershain G: Die exfoliative dermatitis jüngerer sauglinge. *Zentralzeitung für Kinderheilkunde* **2**:3, 1878
8. Melish ME, Glasgow A: The staphylococcal scalded skin syndrome: Development of an experimental mouse model. *N Engl J Med* **282**:1114, 1970 [PMID: 4245327]
9. Lyell A: Toxic epidermal necrolysis: An eruption resembling scalding of the skin. *Br J Dermatol* **68**:355, 1956 [PMID: 13374196]
10. McCormick JK, Yarwood JM, Schlievert PM: Toxic shock syndrome and bacterial superantigens: An update. *Annu Rev Microbiol* **55**:77, 2001 [PMID: 11544350]
11. Leung DY et al: The role of superantigens in human diseases: Therapeutic implications for the treatment of skin diseases. *Br J Dermatol* **53**(Suppl.):17, 1998
12. Leung DY et al: Bacterial superantigens induce T cell expression of the skin-selective homing receptor, the cutaneous lymphocyte-associated antigen, via stimulation of interleukin 12 production. *J Exp Med* **181**:747, 1995 [PMID: 7836926]
13. Todd JK et al: Toxic shock syndrome associated with phage group I staphylococci. *Lancet* **2**:1116, 1978 [PMID: 82681]
14. Shands KN et al: Toxic shock syndrome in menstruating women: Association with tampon use and *Staphylococcus aureus* and clinical features in 52 cases. *N Engl J Med* **303**:1436, 1980 [PMID: 7432402]
15. Rosten PM, Bartlett KH, Chow AW: Serologic responses to toxic shock syndrome (TSS) toxin-1 in menstrual and nonmenstrual TSS. *Clin Invest Med* **11**:187, 1988 [PMID: 3402105]
16. Todd JK: Staphylococcal infections. *Pediatr Rev* **26**:444, 2005 [PMID: 16327025]
17. Schlievert PM: Use of intravenous immunoglobulin in the treatment of staphylococcal and streptococcal toxic shock syndromes and related illnesses. *J Allergy Clin Immunol* **108**:S107, 2001
18. Darenberg J et al: Intravenous immunoglobulin therapy in streptococcal toxic shock syndrome: A European randomized, double-blind, placebo-controlled study. *Clin Infect Dis* **37**:333, 2003 [PMID: 12884156]
19. Cone LA et al: A recalcitrant, erythematous, desquamating disorder associated with toxin-producing staphylococci in patients with AIDS. *J Infect Dis* **165**:638, 1992 [PMID: 1552193]
20. Schlievert PM: Staphylococcal scarlet fever: Role of pyrogenic exotoxins. *Infect Immunol* **31**:732, 1981 [PMID: 7216472]
21. Reid SD et al: Group A streptococcus: Allelic variation, population genetics, and host-pathogen interactions. *J Clin Invest* **107**:393, 2001 [PMID: 11181637]
22. Wang CC et al: Enterotoxin B is the predominant toxin involved in staphylococcal scarlet fever in Taiwan. *Clin Infect Dis* **38**:1498, 2004 [PMID: 15156492]

23. Jarraud S et al: Involvement of enterotoxins G and I in staphylococcal toxic shock syndrome and staphylococcal scarlet fever. *J Clin Microbiol* **37**:2446, 1999 [PMID: 10405382]
24. Manders SM et al: Recurrent toxin-mediated perineal erythema. *Arch Dermatol* **132**:57, 1996 [PMID: 8546484]
25. Manders SM: Toxin-mediated streptococcal and staphylococcal disease. *J Am Acad Dermatol* **39**:383, 1998 [PMID: 9738772]
26. Leung DY et al: Evidence for a streptococcal superantigen-driven process in acute guttate psoriasis. *J Clin Invest* **96**:2106, 1995 [PMID: 7593594]
27. Travers JB et al: Epidermal HLA-DR and the enhancement of cutaneous reactivity to superantigenic toxins in psoriasis. *J Clin Invest* **104**:1181, 1999 [PMID: 10545517]
28. Boguniewicz M, Leung DY: Recent insights into atopic dermatitis and implications for management of infectious complications. *J Allergy Clin Immunol* **125**:4-13, 2010
29. Ong PY et al: Endogenous antimicrobial peptides and skin infections in atopic dermatitis. *N Engl J Med* **347**:1151, 2002 [PMID: 12374875]
30. Schlievert PM et al: Superantigen profile of *Staphylococcus aureus* isolates from patients with steroid-resistant atopic dermatitis. *Clin Infect Dis* **46**:1562-1567, 2008
31. Leung DY et al: Presence of IgE antibodies to staphylococcal exotoxins on the skin of patients with atopic dermatitis. Evidence for a new group of allergens. *J Clin Invest* **92**:1374, 1993 [PMID: 7690780]