Letters to the Editor

Toxic Shock in a Hospital Employee Due to Methicillin-Resistant *Staphylococcus aureus*

To the Editor:

We are writing to report a case of toxic shock syndrome due to methicillin-resistant *Staphylococcus aureus* (MRSA). The patient is a 28-year-old female nurse who works in an ICU where MRSA is endemic. She came to an outpatient clinic after experiencing sore throat, nausea, vomiting, and diarrhea. She was having her menstrual period, but removed her tampon just before seeking medical care. She was transferred from the clinic to an emergency room because of fever and lethargy. Exam revealed a temperature of 103°F, a blood pressure of 80/0, marked lethargy to the point that she was barely arousable, a supple neck, bilateral conjunctivitis, and erythema of the tongue, throat, and skin. Neurologic exam was normal except for lethargy. Pelvic exam was normal, and a Gram stain of vaginal secretions revealed gram-positive cocci in clusters. Vancomycin was started intravenously. The vaginal specimen culture showed a pure growth of MRSA. Blood cultures were negative. Other laboratory studies included: a white blood count of 9,200/mm^3 with 24 bands and 74 segmented neutrophils, a normal platelet count, and a calcium of 4.2 milliequivalents per liter (normal 4.3 to 5.3 mEq/L). The patient improved over the next several days, but she desquamated the skin on both hands about 10 days after her illness began.

The MRSA isolate produced toxic shock toxin-1 (TSST-1) and enterotoxin A. Acute and convalescent sera for TSST-1 antibodies were negative. All these studies were performed by Dr. Merlin Bergdoll, of the Food Research Institute in Wisconsin. In retrospect, the patient reported two similar, but less severe, episodes of illness during her previous periods, including sore throat and desquamation of the palmar skin. She was using a super absorbent tampon.

This case meets the definition of toxic shock syndrome.[1] It is interesting in that the staphylococcal isolate in this case was methicillin-resistant, which is the first time this has been reported. MRSA is an increasing problem in hospitals.[2] Thus, hospital personnel are at risk for infections with MRSA. Physicians should consider use of vancomycin, trimethoprim/sulfamethoxazole, or novobiocin[3] when personnel have evidence of staphylococcal infection and work at a hospital known to harbor MRSA. Further, if the MRSA isolate produces toxic shock toxins, patients may develop toxic shock when colonized or infected with MRSA. Surveillance at the hospital where the nurse works has failed to reveal any cases of toxic shock in patients.

REFERENCES

1. Shands KN, Schmid GP, Dan BB, 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* 1980; 303:1436-1442.
2. Haley RW, Hightower AW, Khabbaz RF, et al: The emergence of methicillin-resistant *Staphylococcus aureus* infection in United States hospitals: Possible role of the house staff patient transfer circuit. *Ann Intern Med* 1982; 97:297-308.
3. Walsh TJ, Sharon LH, Tatem BA, et al: Activity of novobiocin against methicillin-resistant *Staphylococcus aureus*. *J Antimicrob Chemother* 1985; 15:435-440.

Bryan P. Simmons, MD
Charles Munn, MD
Michael Gelfand, MD
Memphis, Tennessee

https://doi.org/10.1017/S0195941700064444 Published online by Cambridge University Press

T H E W O R L D O F

BART PHILLIPS SLOANE

Washington's Headquarters

Built some years before America's war for independence, the Isaac Potts House at Valley Forge was to serve as General Washington's command post. A score of aides crowded in with him to spend the winter. About eighty percent of the building is original, the rest having been restored according to information obtained through historic research.

Edition limited to 850 offset lithographs, signed by the artist.

Image size: 17 × 23-1/2

$70.00 Framed $172.00

A LIMITED EDITION OF COLLECTOR SERIES PRINTS

Bart Phillips Sloane's involvement with the graphic arts has found its happiest expression through the medium of watercolor. The qualities of spontaneity, informality and warmth seem quite naturally related to the watercolor. His success with this is attested to not only by the many awards and prizes he has won, but the many happy owners of his works. In Bart's words, "To meet an enthusiastic owner years after the sale is one of my greatest satisfactions."

FIRST IMPRESSIONS
6900 Grove Road
Thorofare, New Jersey 08086

Please send me _____ print(s) of Washington's Headquarters @ $70.00* postage paid. Unframed.

Please send me _____ print(s) of Washington's Headquarters @ $172.00* postage paid. Framed.

Name _____

Address _____

City _____ State _____ Zip _____

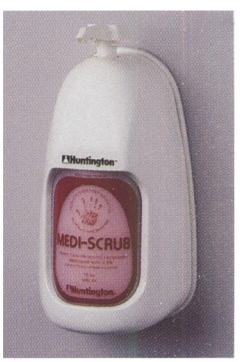
*Payment must accompany order.
N.J. residents please add 6% sales tax.

Medi-Scrub

Because infection control should be everybody's job.

Choosing the right product can make all the difference in getting the staff to stop and take the time to wash their hands. Medi-Scrub® is the right medicated health care personnel handwash for three reasons:

1. Medi-Scrub's formula. Our combination of P.C.M.X. and emollients is fast acting and persistent against bacteria, but gentle to your hands. Tests prove Medi-Scrub's effectiveness against a broad range of pathogenic organisms including antibiotic-resistant Staph and Candida albicans. Participants in these tests, even after repeated handwashing, reported no sign of skin irritation.



2. Disposable dispensing system. Medi-Scrub is packed in our exclusive DisposaCare cartridge, a factory-sealed container with a built-in measuring pump. When it's empty, throw it away. Pump and all. The matching wall-mount dispenser puts Medi-Scrub exactly where you need it. And the dispenser's unique window design lets you see the Medi-Scrub label so there's no question about what's inside.

3. Educational systems. Medi-Scrub is backed by a complete program. A video tape, bilingual filmstrips, posters, buttons and more to help you get Medi-Scrub out of the dispenser and into their hands. And your Huntingtor representative is always ready with technical and training assistance. For more information on Medi-Scrub and the Care System of products, call us now toll-free:

1-800-HGTN LAB

In Canada, call collect: (416) 791-2336

Huntington®

970 East Tipton Street • Huntington, Indiana 46750

https://doi.org/10.1017/S0195941700064444 Published online by Cambridge University Press