Staphylococcal toxic shock: Causes

Clinical criteria for Staphylococcal toxic shock:

1. T > 38.9 C (102 F)
2. SBP < 90 mmHg or < 5th percentile for children
3. Diffuse macular erythroderma
4. Desquamation 1-2 weeks after onset (palms/soles)
5. Multisystem involvement: GI, muscular, mucous membranes, elevated BUN and creatinine, elevated transaminases, PLT < 100,000/microL, disorientation without focal signs and no fever or low BP
6. Negative CSF cultures for another pathogen
7. Negative serology for RMSF, leptospirosis or measles

Causes: The clinical presentations of menstrual and nonmenstrual TSS are similar. Surgical wound sites and cutaneous infections that harbor toxin-producing *S. aureus* are frequently benign, appearing without obvious purulence. *S. aureus* is recovered from wound or mucosal sites in 80 to 90 percent of patients with TSS and recovered from blood cultures in approximately 5 percent of cases

Rx: Supportive, IV fluids, vasoactive agents as needed and antibiotics, surgical debridment.

For MSSA – clindamycin plus oxacillin or nafcillin.

For MRSA clindamycin, plus vancomycin or linezolid

Question:

A 25 year-old female present with acute onset fever, hypotension, seizures and elevated BUN and creatinine. The following is compatible with the diagnosis of Staphylococcus toxic shock syndrome:

a. CSF with gram positive cocci
b. Serology positive for Rocky Mountain spotted fever
c. Platelet count over 400,000 microL
d. Normal procalcitonin level

Answer: A – See keyword