



UNIVERSITY of  
**ROCHESTER**  
MEDICAL CENTER

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DEPARTMENT OF IMAGING SCIENCES

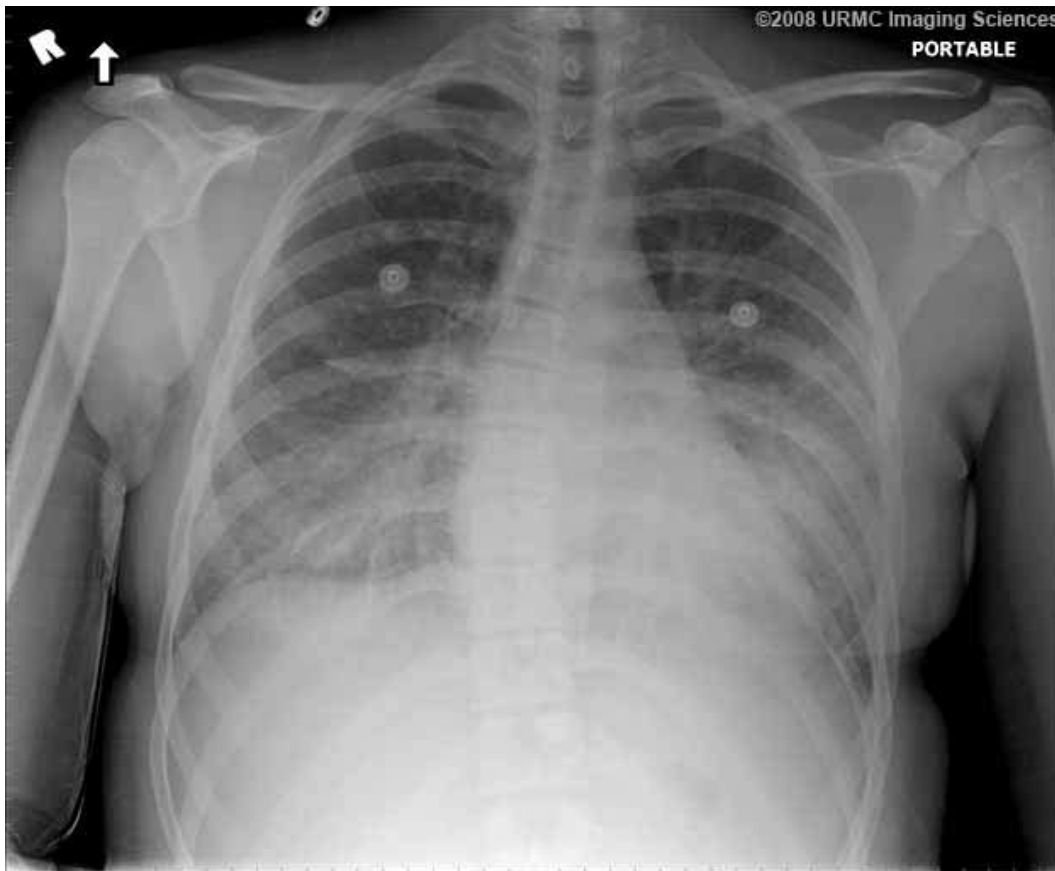
## Imaging Sciences Interesting Cases

### CASE 239

David Tuttle, MD

**CLINICAL PRESENTATION:** A 16-year-old girl presented with tremors, rash, fevers, and vomiting for 3 days, found to have a tampon left in place since 9 pm the previous night, and is now hypoxic.

**IMAGING FINDINGS:** See below.



**Figure 1:** A single AP view of the chest demonstrates interstitial and air space opacities that are most prominent in the lower lung zones. There is fluid in the minor fissure. Note that heart size is normal.

**DIAGNOSIS: Pulmonary edema from menstrual toxic shock syndrome**

**DISCUSSION:** Toxic shock syndrome (TSS) is an acute multisystem disease characterized by fever, hypotension, vomiting, diarrhea, myalgias, nonfocal neurologic abnormalities, conjunctival hyperemia, strawberry tongue, and an erythematous rash with subsequent desquamation of the hands and feet. Pulmonary manifestations include pulmonary edema caused by diffuse pulmonary capillary leak, and may progress to acute respiratory distress syndrome (ARDS). It is caused by TSST-1 producing strains of *S. Aureus*, which may colonize the vagina or cause focal sites of staphylococcal infection.

Menstrual TSS occurs in menstruating women who are 15-25 years of age who use tampons or other vaginal devices such as diaphragms or contraceptive sponges. Treatment includes antibiotics and supportive measures. Ionotropics, corticosteroids, and intravenous immunoglobulin may be helpful in severe cases.

**REFERENCES:**

1. Kliegman RM, Behrman RE, Jenson HB, Stanton BF. Nelson Textbook of Pediatrics, 18th ed. Philadelphia: Saunders, 2007. [MD Consult]