

22 yo Female previously healthy ER clerk S/P smallpox returns for a take check on day 7 post-vaccination. She complains of 2 days of subjective fever, mild headache, fatigue, myalgias and regional lymphadenopathy. She reports that she has been bed-bound due to constitutional symptoms for the preceding 3 days.

On exam she is mildly ill-appearing.

Temp 100.7F, B/P 110/70, P112. and delayed cap refill.

HEENT: Dry mucous membranes

Lungs: clear

CV: No gallop

Abd: soft, no tenderness to palpation

Back: Right costovertebral angle tenderness

Ext: delayed cap refill

Skin: Right deltoid 1cm pustule on erythematous base at vaccination site

UA: sp grav 1.020, WBC TNTC

CBC: 12K WBC with left shift

Urine Cx Pending

Blood Cx Pending

Assessment:

1. Pyelonephritis
2. Major reaction s/p smallpox vaccination

Plan:

1. S/P bolus of 1L normal saline
2. Ceftriaxone 1gm IV
3. Sulfa-Trim 500mg BID x 10 days
4. Return to clinic 3 days, sooner for worsening of symptoms

Three days later she presents for follow-up. Overall she is feeling better but notes new onset pruritic rash x 24 hours for which she has been taking benadryl prn.

Exam reveals a healing vaccination site with early eschar formation and diffuse symmetrical erythematous macular lesions patches on the trunk, extensor surfaces, palms and soles. Upon closer inspection, the lesions are noted to have a dull red to dusky sharply demarcated wheal, with a central papule and surrounding halo of clearing. Mucosal membranes are intact.

She is diagnosed with Erythema Multiforme, the state health official contacted and a VAERS form filled out.

1. What features in the history and physical support this diagnosis?
2. What do you think was the etiology for the EM?
3. What is the expected time course from onset to resolution?
4. What do you want to watch this patient closely for over the next few days?
5. How do you treat this illness?
6. What infection control precautions should be used in this case?
7. Any special considerations for handling the blood and urine cultures that have been obtained?
8. How soon should the VAERS form be submitted?
9. What specialist would you consult? Do you want to call the CDC Clinician Information Line?
10. Is this patient a candidate for safe revaccination with the smallpox vaccine? Why or why not?