Persistent Rash in a Teenager

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A 13-year-old female presents to the emergency room with a three week history of rash on the left arm. It started as a small red papule and has been continually increasing in size since onset. During this time, she has completed treatment with two different antibiotics without improvement. She recently developed swelling in the left anterior axilla, but denies associated pain or fever. She has not recently traveled outside her home city and no other family members have the rash. A week prior to onset of symptoms, the family’s cat had an unknown infection for which it had to be euthanized.
Vital Signs:
T 37.1, HR 64, RR 16, BP 113/74, Wt. 64.5 Kg

Pertinent Exam Findings: 5 cm, tender, ulcerated skin lesion overlying the left deltoid with violaceous borders and associated granulation tissue. Few, scattered, erythematous papules in the surrounding area. An erythematous, fluctuant, tender mass is present on the left, anterolateral chest just medial to the axilla. No palpable axillary, cervical or epitrochlear nodes.

Ultrasound of Axillary Mass: Large, unilocular, irregularly-shaped, complex fluid collection thought most likely to represent abscess.
Differential Diagnosis

- Tularemia
- Pyoderma Gangrenosum
- Bartonella
- Sporotrichosis
- Nocardiosis
Sporotrichosis

• Sub-acute to chronic infection caused by *Sporothrix schenckii*
• Usually involves cutaneous and subcutaneous tissues,
  • It can be seen in other sites in immunocompromised patients
• Located worldwide in variety of climates
• Found in a variety of environmental niches, including sphagnum moss, decaying wood, hay and soil
• Zoonotic transmission traced to several animals, most cases of transmission associated with cats
Sporotrichosis

• After inoculation, primary lesions develop within days to weeks at that site
• Lesion begins as papule, slowly enlarging to become nodular and often ulcerative
• Diagnosis made by clinical recognition
• Laboratory gold standard for diagnosis is culture
• Treat cutaneous and lymphocutaneous sporotrichosis with Itraconazole 6 to 10mg/kg (maximum dose 400 mg) daily in pediatric patients
• Continue treatment until two to four weeks after all lesions have resolved
References
