MEGA JOURNAL OF CASE REPORTS

OPEN ACCESS

Clinical Image

Compiled Date: March 20, 2024

Atypical Presentation of Scarlet Fever: Clinical Image

Javeria Shamim, MD* and Anita Rao, MD

Department Of Pediatrics, University of Texas Medical Branch (UTMB), USA

***Corresponding author**: Javeria Shamim, Department of Pediatrics, University of Texas Medical Branch, 301 University Blvd, Galveston, TX 77555-0354, USA, Tel: 217-926-9250

Case Presentation

Our patient is a 9-year-old African American female with a history of recurrent Streptococcus pharyngitis, allergic to amoxicillin, presented to urgent care with an itchy rash on her face, neck and fingers, which had developed over the course of one day. It initially appeared on her cheek and later involved her face and neck sparing the nasal labial fold and eyelids. The patient denied experiencing fever, redness, or discharge from the rash, nausea, vomiting, diarrhea, sore throat, cough, congestion, or changes in urine color. Three weeks prior, she had been treated with azithromycin for strep throat. She completed the full five-day antibiotic course and disposed of her toothbrush after 48 hours of starting the antibiotic. Despite taking diphenhydramine chewable tablets every four hours since the rash began, there was no improvement in itching. Interestingly, the patient's mother mentioned that she had a similar rash after being treated with amoxicillin for strep pharyngitis, but that occurred on the 10th day of treatment. This time, it had been more than three weeks since she finished antibiotics, and it was a different antibiotic altogether. The patient denied using any new fragrances, body washes, detergents, cosmetics, rings, jewelry, or consuming new foods. There was no contact with anyone exhibiting similar symptoms. The patient's immunizations were up to date. During the physical examination, her pulse was 93 beats/minute, blood pressure was 119/76 mm Hg, temperature was 36.4°C, and respiratory rate was 20 breaths/minute. Oxygen saturation was 99%. The physical exam revealed a blanching, elevated, palpable papular sand paper rash on her face, sparing the nasal labial fold and eyelids. Similar findings were noted on the third, fourth, and fifth digits of her left hand, with no associated discharge or erythema **(Figure 1)**.

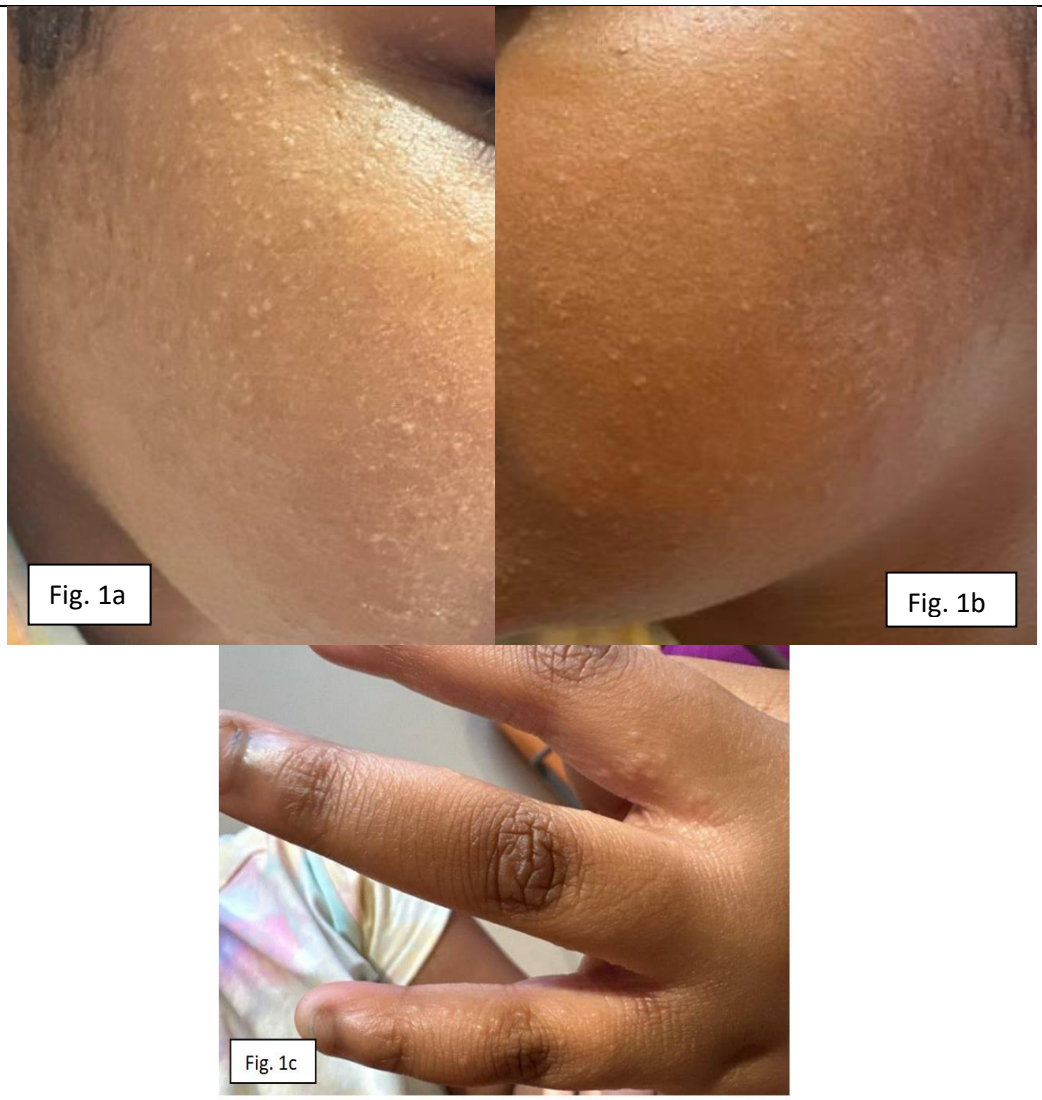
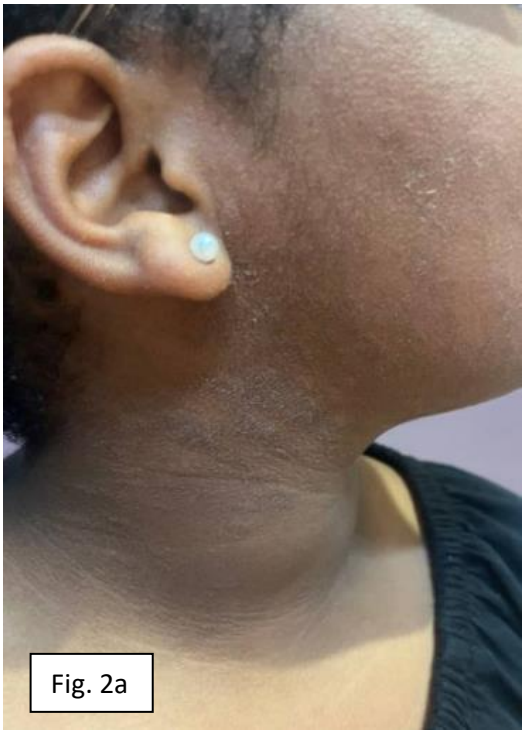


Figure 1: Blanching, elevated, palpable papular sandpaper rash on our patient's face (Fig1a: rash on R cheek, Fig 1b: rash on L cheek), neck and fingers (Fig 1c: Rash on index middle and ring fingers of L hand) on the day of presentation.

Her tonsils were 2+, without petechiae, erythema, exudate, or white patches. Strawberry tongue and cervical lymphadenopathy were not noted. Our patient tested positive for Streptococcus via Point of Care testing, while her COVID test came back negative. Based on the positive test result and physical examination findings, our leading diagnosis was scarlet fever. Our treatment approach involved initiating the patient on cefdinir (14 mg/kg/day) for a 10-day course, administered once daily. The patient was sent home with return precautions. During the follow-up after 10 days, the rash was peeling **(Figure 2)** without the evidence of the spreading of the rash.



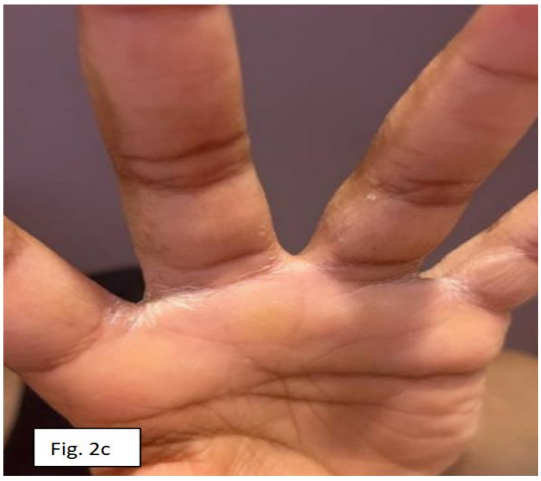


Figure 2: Desquamation of the skin in the same areas noted where the rash was present earlier upon follow up on 10th day (Fig 2a: rash on R side of face and neck; Fig 2b: rash on L side of face and neck; Fig 2c: rash on index, middle and ring fingers of L hand with similar characteristics).

Discussion

This case was notable due to the atypical presentation of scarlet fever with the rash being limited to the face, neck and fingers instead of the typical generalized involvement of the entire body [1]. We considered other differentials, including hand-foot-mouth disease, but it seemed unlikely due to the rash presentation [2]. Contact dermatitis was also improbable, as there was no history of exposure to new jewelry/cosmetics or other irritants [3]. The rash stands

out because it does not exhibit the typical characteristics of eczema, which makes it less likely to be a differential diagnosis [4]. Additionally, the lack of involvement on the finger, wrist, or waistline made scabies less likely. Notably, the patient experienced localized itching in the rash area rather than generalized itching.

References

1. McKinnon Jr HD, Howard T. Evaluating the febrile patient with a rash. Am Fam Physician. 2000;62(4):804-16.
2. Saguil A, Kane SF, Lauters R, Mercado MG. Hand-foot-and-mouth disease: rapid evidence review. Am Fam Physician. 2019;100(7):408-14.
3. Bains SN, Nash P, Fonacier L. Irritant contact dermatitis. Clin Rev Allergy Immunol. 2019;56(1):99-109.
4. Berke R, Singh A, Guralnick M. Atopic dermatitis: an overview. Am Fam Physician. 2012;86(1):35-42.

Citation of this Article

Shamim J and Rao A. Atypical Presentation of Scarlet Fever: Clinical Image. Mega J Case Rep. 2024;7(3):2001-2004.

Copyright