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Case Report

Chronic oozing skin lesions in children: Possible tuberculosis? Two case reports ☆

Amira Bahour [a], *Eman Sobh* [b,*], *Sahar Elsayed* [c], *Wegdan Amer* [a]

[a] *Pediatric Diseases Department, Abbassia Chest Hospital, Cairo, Egypt*
[b] *Chest Diseases Department, Faculty of Medicine for Girls, Al-Azhar University, Cairo, Egypt*
[c] *Pathology Department, Abbassia Chest Hospital, Cairo, Egypt*

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ABSTRACT

Cutaneous tuberculosis is frequently misleading and challenging, as it mimics a wide differential diagnosis. Here, we present two pediatric cases with chronic multiple ulcerating nodules. Proper history, physical examination, and histopathological analysis are included in the workup of suspected skin tuberculosis. Diagnosis was confirmed by positive culture for mycobacteria.

Case 1

A 6-year-old female patient presented with a painless lesion in the middle of the back discharging serous fluid, as well as another swelling in front of the right ear. The condition started 1.5 years ago with an edematous nodule on the right upper eyelid that was treated with antibiotics, but it enlarged and closed her eye. It was diagnosed as an abscess, underwent surgical excision, and healed by fibrosis. One month later, another swelling appeared in the right upper part of the neck, starting as a small papule and enlarging in size. The skin overlying it became purplish in color, followed by ulceration ending in scarring. During this period, the patient was febrile, with no toxemic manifestations and no evidence of other system affliction.

After 2 months, swelling appeared on the face beside the lobule of the right ear in the pre-auricular area, followed by other three swellings in the middle of the back, which opened and discharged serous fluid and did not respond to antibiotic treatment. The patient experienced low-grade fever and loss of both appetite and weight.

The discharging fluid from the back swelling was examined by fine-needle aspiration and diagnosed as suppurative necrotizing granulomatous inflammation. There was no

* Corresponding author at: Chest Department, Al-Zahraa University Hospital, 11517 Al-Abbassia, Cairo, Egypt.
E-mail address: emansobh2012@gmail.com (E. Sobh).

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response to treatment with broad spectrum antibiotics, and bacterial and fungal cultures from the discharging fluid were negative, Therefore, she was referred for consultation with a tuberculosis (TB) expert.

On physical examination, all vital signs were normal. The patient was of average weight, there was no lymphadenopathy, and systemic examination revealed no abnormalities. On the right upper eye lid, there was a small scar 2 cm in length (Fig. 1).

Examination revealed a regularly bordered, pink, raised lesion with a central fibrous scar on the right side of the face (2 cm × 5 cm), in front of the lobule of the right ear, and in the right upper part of the neck (2 cm × 6 cm; Fig. 2).

In the middle of the back, there were three ulcers, with the largest one measuring ~4 cm × ~5 cm, with undermined edges oozing serous fluid and surrounded by crusty, irregular, pale granulation tissue (Fig. 3).

Routine biochemical analysis, complete blood count, and urine analysis were all normal. Erythrocyte sedimentation rate (ESR) was 65 for the 1st hour. The chest radiograph was normal, and chest computerized scan revealed left apical fibrotic scarring likely related to an old granulomatous infection. No signs of active pulmonary tuberculosis were present. Magnetic resonance imaging of the vertebral bone showed normal results.

The tuberculin skin test (Mantoux test) was positive (induration 25 mm × 28 mm). Three samples of sputum and swabs from discharging fluid for acid-fast bacilli were all negative. The discharging fluid was taken for culture for TB.

A skin biopsy from the back lesion was taken for histologic examination and also for culture for TB. The histologic examination revealed non-caseating epithelioid granulomata with pseudoepitheliomatous hyperplasia suggestive of TB of the skin.

Case 2

A 5-year-old female presented with multiple swellings and discharging sinuses (oozing thick, whitish fluid) over the skin of the left upper part of the neck and submandibular area. The surrounding skin was purple-blue in color with elevated edges.

Six months later, the patient developed two upper-left cervical swellings and one submandibular swelling that was treated with multiple courses of antibiotics with no response. These swellings began to open by fistula to the outer skin, oozing thick white fluid (Fig. 4).

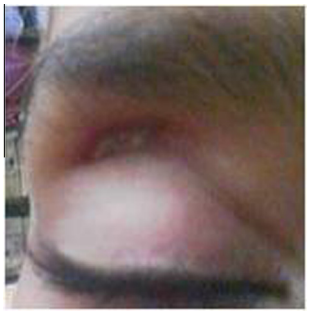

Fig. 1 – Scar on the right upper eye lid.

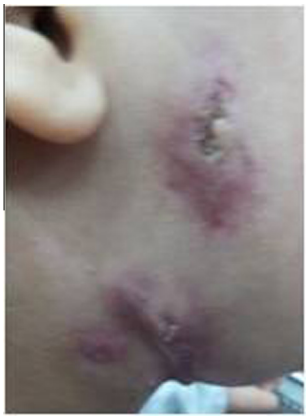

Fig. 2 – Lesion in the upper part of the neck and in front of the right ear.

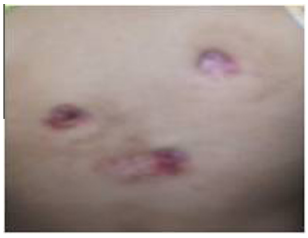

Fig. 3 – Three ulcers on the middle of the back.

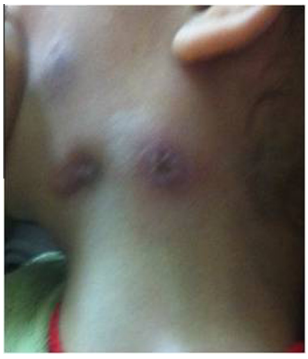

Fig. 4 – Skin lesions.

The patient had no history of chest disease and no chest symptoms, and no contact history with a TB-related case. Routine biochemical analysis, complete blood count, and urine analysis were all normal. ESR was 70 for the 1st hour, and the chest radiograph was normal. The tuberculin test was positive (induration 22 mm × 24 mm), and a quantiferon TB gold test was positive. Gastric lavage was negative for mycobacteria.

Swabs from the discharging fluid were sent for pyogenic culture and culture for acid-fast bacilli. A neck ultrasound revealed multiple bilateral-cervical, left-supraclavicular, and left-axillary lymph nodes (LNs) ranging from 1.4 cm to 1.7 cm. Some of the cervical and supraclavicular LNs were forming cystic turbid abscesses from 0.7 cm to 2.3 cm in size.

Skin and LN biopsy was done, with the skin showing dense dermal infiltration by chronic inflammatory cells and