REDISCOVERING THE PHYSICAL EXAM

Subacute Multifocal Abscesses Related to a *Mycobacterium marinum* Infection in a Child



n 8-year-old boy presented with multiple inflammatory cutaneous lesions on both hands that had been evolving for 4 weeks. At the onset, the child received a 10-day course of amoxicillin/clavulanic acid without improvement. Findings of a physical examination revealed multiple abscesses on both hands (Figure 1) and a suppurative adenopathy of the right arm (Figure 2). The child had no history of fever and was in good health. He had no other symptoms or clinical signs. There were no laboratory abnormalities detected. Conventional bacteriological examination of a hand skin biopsy revealed Staphylococcus epidermidis contamination; mycological culture, Orthopoxvirus, and Parapoxvirus polymerase chain reaction were negative. Inflammatory changes without granuloma were noticed on histologic analysis. An aspirate was collected from the lymph node; after 6 weeks of prolongated culture at 30°C, the laboratory isolated Mycobacterium marinum on Coletsos solid medium. The child then reported having played in a pond a few weeks before the abscesses. A 1-month course of clarithromycin accelerated the healing process.

M marinum is the most frequent nontuberculous mycobacteria (NTM) involved in skin infection. This cosmopolitan



Figure 1. Abscesses of the left hand.

J Pediatr 2021;230:255-6. 0022-3476/\$ - see front matter. © 2020 Elsevier Inc. All rights reserved. https://doi.org/10.1016/j.jpeds.2020.11.066 infection occurs in a patient with a history of minor trauma exposed to soil or more often water containing contaminated fish. It typically affects the exposed areas of the upper limbs and presents as a single nodule that occasionally spreads in a sporotrichoid disposition. Abscessed forms of NTM skin infection usually are associated with rapidly growing NTM and rarely with M marinum.¹⁻³ Systemic dissemination of the infection can occur in immunocompromised subjects.⁴ Diagnosis is confirmed in about 75% of cases by solid culture, which may take several weeks. The laboratory should be made aware of the suspicion of *M* marinum infection to perform specific cultures. DNA-specific polymerase chain reaction amplification on skin biopsy may confirm the diagnosis in case of culture negativity.⁵ Histology frequently reveals a granulomatous reaction, but a nonspecific inflammatory infiltrate without granulomatous reaction can be observed.⁵

Clémence Briand, MD

Service de dermatologie Hôpital Archet CHU de Nice

Alice Gaudart, MD

Laboratoire de bactériologie Hôpital Archet CHU de Nice

Diane Demonchy, MD

Service de pédiatrie Fondation Lenval

Thomas Hubiche, MD

Service de dermatologie Hôpital Archet CHU de Nice Nice, France

References

- 1. Cantisani C, Richetta A, Bitonti A, Curatolo P, Ferretti G, Mattozzi C, et al. Recurrent cutaneous abscesses in two Italian family members. Infect Dis Rep 2010;2:11.
- Feng H, Su Y, Fu S, Zhou Y, Xiao R, Wu R, et al. Image gallery: fish tank granuloma on the face with sporotrichoid cervicofacial lymphadenitis and abscesses due to *Mycobacterium marinum* infection. Br J Dermatol 2019;180:e180.
- 3. Mei Y, Zhang W, Shi Y, Jiang H, Chen Z, Chokkakula S, et al. Cutaneous tuberculosis and nontuberculous mycobacterial infections at a national specialized hospital in China. Acta Derm Venereol 2019;99:997-1003.
- **4.** Enzensberger R, Hunfeld K-P, Elshorst-Schmidt T, Böer A, Brade V. Disseminated cutaneous *Mycobacterium marinum* infection in a patient with non-Hodgkin's lymphoma. Infection 2002;30:393-5.
- 5. Bonamonte D, De Vito D, Vestita M, Delvecchio S, Ranieri LD, Santantonio M, et al. Aquarium-borne *Mycobacterium marinum* skin infection. Report of 15 cases and review of the literature. Eur J Dermatol 2013;23:510-6.



Figure 2. Inflammatory adenopathy of the arm.

Postvoiding Wetting in a Prepubertal Girl

7-year-old girl reported a sensation of incomplete bladder emptying with urine leakage after voiding. She had no other low urinary tract symptoms, or urinary tract infection history. She had a daily bowel movement with type-IV stool on the Bristol Stool Scale. Urinalysis did not disclose signs of urinary tract infection. Her voiding diary for 2 consecutive days demonstrated a urinary frequency of 7-8 times per day, with a maximal voided volume of 150 mL.

The results of physical examination were unremarkable, except for nearly complete fusion of labia minora with a pinhole opening and erythema of perineal area (Figure 1). Urine leakage was found during examination. Ultrasonography demonstrated an anechoic cystic lesion posterior to the urinary bladder on the transverse view, which became tubular in the longitudinal view but disappeared after voiding (Figure 2, A and B), indicating hydrocolpos. Postvoiding residual urine volume was 4.8 mL (within the normal range). Labial fusion was treated through surgical separation, followed by topical estrogen cream application.

Daytime incontinence because of different causes occurs in 3.1%-9.5% of school-age girls.¹ Labial fusion is common among prepubertal girls with incidence rate of 1.8%,² which may be underreported. Postvoiding urine accumulation in

J Pediatr 2021;230:256-7. 0022-3476/\$ - see front matter. © 2020 Elsevier Inc. All rights reserved. https://doi.org/10.1016/i.jpeds.2020.11.001

Figure 1. Labia minora fusion.