Photo Quiz: A 53-Year-Old Thai Man with Progressive Swelling of the Left Index Finger

Piyaporn Chokevittaya, Anucha Apisarnthanarak, Sirithhin Chansirikarnjana, Chinnakart Boonyasirikool, Jutatip Kintarak, David J. Weber

Division of Infectious Disease, Faculty of Medicine, Thammasat University, Pathum Thani, Thailand
Department of Orthopedic Surgery, Thammasat Hospital, Pathum Thani, Thailand
Department of Pathology and Forensic Medicine, Thammasat Hospital, Pathum Thani, Thailand
Division of Infectious Diseases, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA

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A previously healthy 53-year-old Thai man living in central Thailand (Pathum Thani) presented with progressive swelling of his left index finger for 4 months. He worked at an advertising company, and his hobbies included gardening and decorating corals at his home. The swelling site was located where he had been bitten by an ant.

FIG 1 (A) Swelling of the left index finger with one yellow spot at the proximal phalanx. (B) MRI of the left hand reviewed a tear of the flexor tendon of the left index finger, tenosynovitis, and an abscess. (C) Gram stain of pus (magnification, ×1,000). (D) Acid-fast stain of pus (magnification, ×1,000).

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Address correspondence to Anucha Apisarnthanarak, anapisarn@yahoo.com.
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while gardening near a pond. He had previously been diagnosed as having a trigger finger (stenosing tenosynovitis). He had a tendon sheath steroid injection 1 month prior to admission and was given empirical oral antibiotics that included clindamycin, trimethoprim-sulfamethoxazole, and levofloxacin. Two weeks prior to admission, he noticed a yellow spot on his left index finger (Fig. 1A). His initial laboratory test results included a white blood cell count of 7,610 cells/mm³ (reference, 4,000 to 11,000 cells/mm³), 67.5% neutrophils, 18% lymphocytes, a hemoglobin level of 15.8 g/dl (reference, 13.5 to 17.5 g/dl), a platelet level of 276 × 10³ g/dl (reference, 140 × 10³ to 440 × 10³ g/dl), and an erythrocyte sedimentation rate (ESR) of 57 mm/h (reference, <20 mm/h). Magnetic resonance imaging (MRI) of his left hand revealed a tear of the flexor tendon of the left index finger, tenosynovitis, and an abscess with a size of 4.2 cm in width, 2.6 cm in depth, and 3.9 cm deep to the thenar area extending to the flexor tendon (Fig. 1B). He was admitted and had emergency surgery, which found yellow-brown pus, synovitis, and necrotizing soft tissue infection along the tendon sheath. A Gram stain and an acid-fast stain of the pus are shown in Fig. 1C and D, respectively. Pus and tissue specimens were submitted for aerobic, anaerobic, fungal, and mycobacterial cultures. Mycobacterial culture was performed at 32°C by inoculating the sediment on Lowenstein-Jensen (LJ) solid medium and in the Bactec MGIT 960 system (Becton, Dickinson [BD], Sparks, MD).