



Photo Quiz: Pneumonia and Pyogenic Skin Abscesses in a 79-Year-Old Man

Jürgen Held,^a Heiko Schweizer,^b Sabine Zange,^c Marcus Panning,^d Winfried V. Kern,^e Dirk Wagner^e

^aInstitute for Microbiology and Hygiene, Medical Center—University of Freiburg, Freiburg, Germany

^bRenal Division, Department of Internal Medicine, Medical Center—University of Freiburg, Freiburg, Germany

^cBundeswehr Institute of Microbiology, Munich, Germany

^dInstitute for Virology, Medical Center—University of Freiburg, Freiburg, Germany

^eDivision of Infectious Diseases, Department of Medicine II, Medical Center—University of Freiburg, Freiburg, Germany

KEYWORDS infection, skin

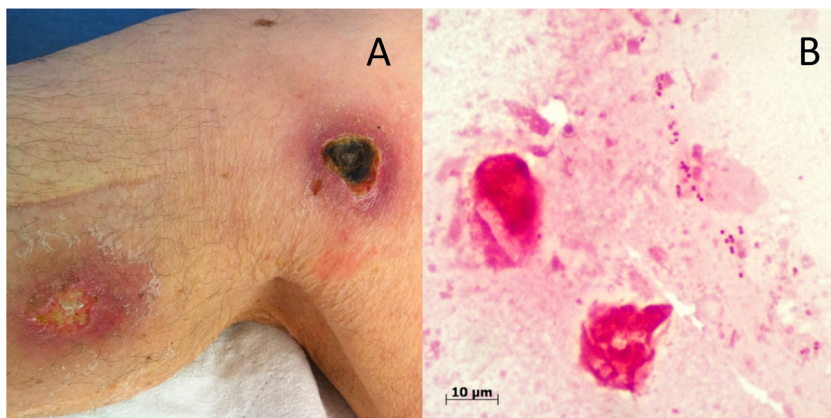


FIG 1 (A) Two of multiple cutaneous abscesses on the right knee and lower leg of the patient. The lesion on the right was the first one that appeared. (B) Gram staining of sputum showing the pathogen (magnification, 1,000×).

A 79-year-old Caucasian male had traveled for 3 months in the Ukraine and Kazakhstan, where he was hospitalized for 3 weeks because of decompensated chronic heart failure, New York Heart Association (NYHA) classification 3. Acute myocardial infarction was ruled out. No further diagnostic workup was done for the swollen right leg. Two weeks later, an inflammation on the right knee (several centimeters in diameter) with a central necrosis appeared and within a few days developed into a cutaneous pyogenic abscess. During the 4 days following, further deep skin abscesses developed distally on the same leg. During the whole hospitalization, the patient was afebrile. Oral antibiotic therapy (regimen unknown) was given and the patient discharged. He continued his travel in the Ukraine for another 3 weeks.

Directly after his return, the patient was hospitalized for deep vein thrombosis with consecutive central pulmonary embolism. Within the previous 2 months, he had lost 10 kg of weight. On admission, his white blood cell count was 15.6×10^9 cells/liter with 78% neutrophils. His C-reactive protein level was moderately elevated (77 mg/liter), and his alanine aminotransferase (ALT) level was thrice the normal value. A chest computed tomography (CT) scan showed, besides the pulmonary embolism, pneumonia of the right upper lobe and two small nodules without surrounding infiltration in both upper

Citation Held J, Schweizer H, Zange S, Panning M, Kern WV, Wagner D. 2018. Photo Quiz: Pneumonia and pyogenic skin abscesses in a 79-year-old man. *J Clin Microbiol* 56:e03352-15. <https://doi.org/10.1128/JCM.03352-15>.

Editor P. Bourbeau

Copyright © 2018 American Society for Microbiology. All Rights Reserved.

Address correspondence to Dirk Wagner, dirk.wagner@uniklinik-freiburg.de.

For answer and discussion, see <https://doi.org/10.1128/JCM.03353-15> in this issue.

lobes. The results for a tuberculosis-specific gamma interferon release assay, PCR, and repeated sputum cultures for mycobacteria were negative. The cutaneous lesions on the right leg had progressed (Fig. 1A), and magnetic resonance imaging (MRI) showed deep abscesses involving fasciae but not bone structures. Empirical therapy with intravenous cefuroxime did not alter the clinical picture.

After 4 days of incubation on standard media (Columbia and chocolate blood agars), the cultures of aspirates from the cutaneous abscesses showed growth of a pathogen. The same pathogen was also visible in Gram stains (Fig. 1B) from sputum samples but could not be isolated, due to overgrowth with oral flora and because the culture was discarded after 2 days.

What might this pathogen be?