Photo Quiz: A 66-Year-Old Man with Bloodstream Infection and Back Pain

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FIG 1 Gram stain of the positive blood culture in an aerobic bottle (magnification, $\times 1,000$).

A 66-year-old man visiting from India with a history of type II diabetes mellitus was brought to the emergency department (ED) of the Auburn Medical Center (Auburn, WA) for fatigue, fever (101.5°F), and right flank and lower back pain. His examination revealed tachycardia (119 beats per minute) and mild leukocytosis (12,550 cells/ μ l; reference range, 4,000 to 12,000 cells/ μ l). He was initially sent home with cephalexin (500 mg twice a day [BID]) and acetaminophen for suspected urinary tract infection. The urine culture result was negative. Three days later, he returned to the ED with worsening back pain, despite resolved fever and a reduced white blood cell (WBC) count of 9,500 cells/ μ l. On admission, he was treated empirically with ceftriaxone (2 g daily). The magnetic resonance imaging (MRI) study revealed discitis at lumbar vertebrae 1 to 5 without abscess, phlegmon, or osteomyelitis.

A total of 4 sets of blood cultures were drawn during the two ED visits, and all aerobic bottles (BD Bactec standard aerobic medium, BD Bactec FX system; Becton, Dickinson and Company, Franklin Lakes, NJ) became positive after 3 days of incubation. The Gram stain of the positive blood culture is shown in Fig. 1. The Verigene GP panel (Luminex, Austin, TX) did not identify any organism. After 2 days of incubation, pure

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growth of small, gray, convex, smooth colonies was observed on the sheep blood and chocolate agar plates. The catalase test result was positive. Matrix-assisted laser desorption ionization–time of flight mass spectrometry (MALDI-TOF MS) (Bruker Daltonics, Billerica, MA) failed to identify the organism using the *in vitro* diagnostics (IVD) database, despite the use of the extraction method, and the isolate was sent to a reference laboratory for 16S rRNA gene sequencing. Meanwhile, vancomycin (1,000 mg, intravenous, every 12 hours [q12h]) was added to the regimen.