Of rods, gas and spine

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Bâtons, gaz et colonne

A previously healthy 72-year-old woman presented with fever, confusion, and hypotension. On examination, we noted jaundice. Laboratory tests revealed leukocytosis and elevated aminotransferases and bilirubin. A computed tomography scan showed air within the lumbar vertebral bodies, spinal canal and pelvis; air also involved ribs and the inferior vena cava (figure 1). Heavy bacteremia by Gram-positive boxcar-shaped rods was found on a peripheral-blood smear and Clostridium perfringens grew on anaerobe bottles. The patient died of septic shock a few hours later. Autopsy showed right lung bronchial carcinoma and lytic metastases of the spine.

This patient presented with gas osteomyelitis of the spine, bacteremia and fulminant septic shock due to C. perfringens. Seven other cases of C. perfringens-associated vertebral osteomyelitis are reported [1]. All of them had gas gangrene of the trunk, which was not a feature of our case. If bronchial cancer was the portal for bloodstream entry in our patient is unproven even though malignancy itself may injury the mucosal barrier and facilitate invasion. However, C. perfringens is isolated from the vagina or rectum in about 10% of healthy women [2]. C. perfringens causes up to 80% of bloodstream clostridial infections, course is aggressive and outcome generally adverse.
with 30 to 50% mortality in most series [3,4]. Immunosuppression, trauma, muscle necrosis, intra-abdominal infection, surgery and pneumonia are predisposing conditions. Shock and massive hemolysis predict a fulminant course regardless of other parameters of disease severity [5]. Blood cultures and Gram's stain are the gold-standard diagnostic tests for C. perfringens septicemia.

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**References**


