



Images in medicine

Urinary tract infection and pulmonary abscess, a rare association

Infección de vías urinarias y absceso pulmonar, una rara asociación

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Clinical case

An 84-year-old male was referred to the emergency service with a history of fever, dysuria and polyuria with a duration of 2 days. There was also a complaint of discrete asthenia and a recent high-grade glioblastoma excision under post-intervention corticosteroid therapy (dexamethasone 4 mg **once daily**).

Initially admitted with suspicion of nosocomial infection, it was empirically treated with piperacillin/tazobactam with posterior confirmation of urinary tract infection by positive culture for *Enterococcus faecalis* and *Serratia marcescens*, the latter also as bacteremia. Therapy was adjusted to a directed course of ciprofloxacin and vancomycin as indicated by sensitivity results, with initial clinical improvement after 10 days.

Under this antibiotic course, the patient started developing dyspnoea, a productive cough with hemoptoic sputum and reappearance of fever. Sputum culture isolated the same strain of *Serratia* already identified and chest radiography demonstrated new pulmonary nodular bilateral lesions (**Fig 1**), confirmed to be of *de novo* pulmonary abscesses on chest CT scan (**Fig 2A and 2B**).

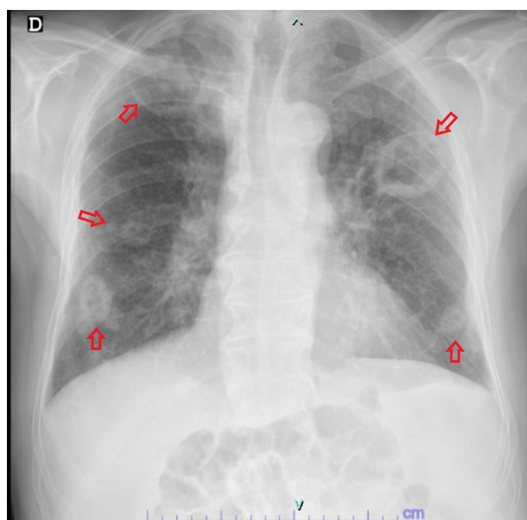


Fig. 1. Chest radiography after 10 days anti biotherapy, visible multiple nodular lesions bilaterally (red arrows), not present on admission.

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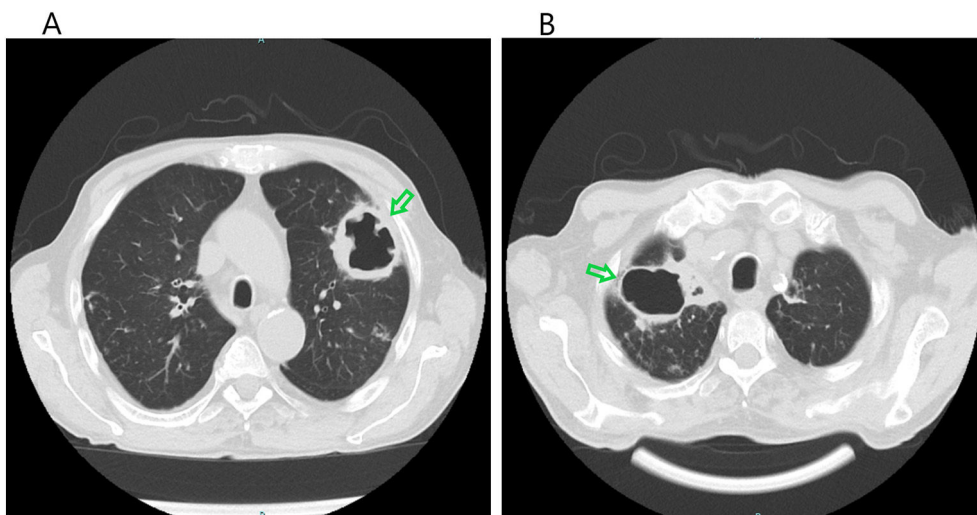


Fig. 2. Thoracic CT scan (axial) demonstrating the larger lesions visible on the chest radiography (green arrow), corresponding to cavitated abscess of 67 mm in the right apical lobe and a 54mm diameter lesion localized in the posterior segment of the left superior lobe.

Immunocompromised patients, even under directed therapy, may have inadequate response rates and are at greater risk of infectious complications, in this case, hematogenous dissemination from a urinary starting point to multiple lung abscesses of significant size, requiring readjustment of antibiotic therapy to 6 weeks of meropenem, with favourable response.

Declaration of Competing Interest

None

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This study was reviewed and approved by the Ethical Commission of Centro Hospitalar Universitário Cova da Beira.