DESCRIPTION

A 72-year-old woman was admitted to our hospital in August 2011 with a 5-day history of fever. She had been taking prednisolone at 10 mg/day for several years as treatment for autoimmune thrombocytopenia. On admission, she was febrile with a body temperature of 38.5°C, and peripheral oxygen saturation was 88% in room air. Serum β-D-glucan and galactomannan (GM) testing yielded negative results. Chest radiography on admission showed reticulonodular infiltration, particularly in both lower fields (figure 1). CT of the chest showed sparsely distributed ground-glass alveolar opacities with patchy consolidation (figure 2). Therapy was initiated with broad-spectrum antibiotics (pazufloxacin), but respiratory status continued to deteriorate. Bronchoscopy was then performed 4 days after admission. Positive results were obtained for GM testing of broncho-alveolar lavage (BAL) fluid (>5.0), while culture of BAL fluid yielded negative results. Invasive pulmonary aspergillosis (IPA) was thus diagnosed. Therapy was initiated with 3 mg/kg/day liposomal amphotericin B, leading to immediate improvements in both radiological findings and hypoxaemia. In this case, typical radiological findings of IPA on CT, such as dense, well-circumscribed lesions with a halo sign, were not evident and serum β-D-glucan and GM testing yielded negative results. BAL GM can be useful for early diagnosis of IPA in haematological malignancies with pulmonary infiltrates.1

Learning points

- Early diagnosis of invasive pulmonary aspergillosis is essential for maximising treatment efficacy and survival, but the prompt diagnosis of invasive pulmonary aspergillosis remains difficult.
- The clinical and radiological findings in the early stage of infection are often non-specific particularly in non-neutropenic patients.
- BAL GM is extremely useful for early diagnosis of IPA in haematological malignancies with pulmonary infiltrates, due to the high sensitivity and specificity.

REFERENCES
