Letter to the Editor

Pleuritis caused by Acremonium strictum in a patient with metastatic testicular teratocarcinoma

Dear Editor,

A 23-year-old boy was hospitalized for dyspnea with mild fever. Chest x-ray documented left pleural effusion. Cultures from thoracentesis grew out Acremonium strictum and intravenous liposomal amphotericin B was given at a dose of 200 mg daily. On treatment, fever subsided but dyspnea worsened. Whole-body CT scan showed multiple bilateral lung nodules, systemic lymphadenopathies and a mass over the left testis. Biopsies from an enlarged supraclavicular lymph node revealed metastatic testicular teratocarcinoma. Chemotherapy with PEB was started but, at day 70 from admission, the patient died of acute respiratory distress syndrome.

Acremonium (formerly Cephalosporium) species are filamentous fungi commonly found in soil and plants. Of note, cephalosporins were isolated from this class of hyphomycetes in 1951. In humans, they are rare opportunistic pathogens, mainly causing in immunocompetent individuals superficial infections such as foot mycetoma, keratitis and onychomycosis. Invasive infections are exceptional since only a dozen reports exist in the pertinent literature: such conditions usually occur in severely immunocompromised patients with hematologic diseases or solid tumors and include fungemia, meningitis, brain abscess, peritonitis and pyomyositis. Protracted neutropenia, corticosteroid therapy and the presence of a central venous catheter represent the principal predisposing factors. As for the respiratory system, Acremonium strictum has been associated with two types of lesions: multiple bilateral nodules with no halo sign (4 cases) and pleuritis (2 cases including ours). The prognosis of invasive infection from Acremonium spp. is usually unfavorable with a mortality rate of 30%. The reasons of such a poor outcome are related to the delay in diagnosis and specific therapy, lack of standard treatment because of the rarity of such infections, and the little susceptibility to the common antifungal agents such as fluconazole and flucytosine. Liposomal amphotericin B and the newer azoles such as posaconazole are the most effective drugs.

Conflicts of interest

The author declares no conflicts of interest.

References


Eduardo Virgilio*, Paolo Mercantini
Medical and Surgical Sciences and Translational Medicine, Faculty of Medicine and Psychology “Sapienza”, St. Andrea Hospital, via di Grottarossa 1035-39, Rome 00189, Italy

Sara Abu Samra
Obstetrics and Gynecology, Aurelia Hospital, via Aurelia 860, Rome 00165, Italy

*Corresponding author.
Marco Vitali
Operative Central Unit, Ospedali Riuniti Marche Nord, St. Salvatore Hospital, Piazzale Cinelli 4, Pesaro 61121, Italy

Marco Cavallini
Medical and Surgical Sciences and Translational Medicine, Faculty of Medicine and Psychology “Sapienza”, St. Andrea Hospital, via di Grottarossa 1035-39, Rome 00189, Italy

*Corresponding author.
E-mail address: aresedo1992@yahoo.it (E. Virgilio).

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