

## PULMONARY PENICILLOSIS MARNEFFEI IN A CANCER PATIENT WITHOUT ENDEMIC AREA EXPOSURE: A CASE REPORT

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70-year-old African American female with breast cancer metastatic to lung presented with respiratory failure requiring mechanical ventilation. She had a dry cough and progressive dyspnea over the preceding 2 months with rapid deterioration in the last two weeks. She denied fever, night sweat or hemoptysis. She had undergone a right mastectomy in 1983 followed by chemotherapy, radiation therapy and tamoxifen for the breast cancer. She grew up in South Carolina, moved to Virginia before settling in Florida. She worked as a cook and cleaning person at Homestead Air Force Base before retirement in 1990's. She had not traveled out of the United States other than Puerto Rico. She never traveled to South East Asia or China. She does not recall exposure to rats. Physical examination was pertinent for no skin lesions and decreased breath sound with rhonchi on the right chest. Chest roentgenogram revealed diffused interstitial disease, and bilateral pleural effusions. High-resolution computerized tomography showed thickening of the interlobar septum with a patchy area of ground-glass attenuation bilateral. Bronchoscopic findings revealed no endobronchial lesions. Bronchoalveolar lavage and bronchial brushing revealed adenocarcinoma and culture grew *Penicillium marneffe*i (verified by the Mayo Clinic referral lab). She received broad spectrum antibiotics with eventual extubation. Because of her cancer status and hospice treatment, she desired out patient management. She received oral itraconazole 200 mg twice daily. She expired 4 month later due to neutropenic fever and multiple organ failure with *P. marneffe*i. *Penicillium marneffe*i is primarily a human pathogen in South China and Southeast Asia. Cases reported from Western countries find a history of travel or prior residence in an endemic area. We report the first case of *Penicillium marneffe*i pneumonia occurring in a patient who never lived or traveled to the endemic area. Acquisition of the mold could have occurred while working at an Air Force base in South Florida. Subsequent reactivation 10 years later could have resulted from the immunosuppression caused by end stage metastatic breast cancer and radiation therapy.