

P0082

Poster Session I

Confronting fungal infections

## INVASIVE PULMONARY INFECTION CAUSED BY *CHRYSOSPORIUM ARTICULATUM*: THE FIRST CASE REPORT

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**Objectives:** *Chrysosporium* species, saprobic soil fungi, have rarely been reported to cause invasive infection in humans. We report herein the first case of invasive pulmonary infection caused by *Chrysosporium articulatum* in an acute lymphoblastic leukemia (ALL) patient with successful treatment with voriconazole.

**Methods:** The medical record of the patient who was hospitalized at King Chulalongkorn Memorial Hospital, Bangkok, Thailand from April to May 2013 was reviewed.

**Results:** A 16-year-old man with acute T-cell lymphoblastic leukemia was hospitalized for the second phase of chemotherapy. One day after hospitalization, he developed left pleuritic chest pain and both chest X-ray and computed tomogram showed a cavitory lesion, 2 cm in size, at the left upper lobe. Transcutaneous core needle biopsy of the mass was performed, and the tissue fresh smear revealed numerous hyaline filamentous molds with dichotomous branchings (Figure). The histopathology of the tissue showed subacute lung injury characterized by loose fibroblastic stroma, pneumocyte type II hyperplasia with moderate mixed lymphocytic and neutrophilic infiltration. The tissue culture grew the hyaline filamentous mold which was finally confirmed to be *Chrysosporium articulatum* by sequencing of the ITS of ribosomal RNA. Chemotherapy was initiated 1 week after treatment with voriconazole of 400 mg/day. His pleuritic chest pain gradually improved, and was discharged 50 days after hospitalization with his chest X-ray and computed tomogram showing the marked reduction of left upper lobe mass.

**Conclusion:** To the best of our knowledge, this was the first case of invasive pulmonary infection caused by *Chrysosporium articulatum* in a patient with ALL who was successfully treated with voriconazole. Due to handful cases of invasive *Chrysosporium* infection, clinical manifestations, antifungal susceptibility, and treatment outcomes are limited.