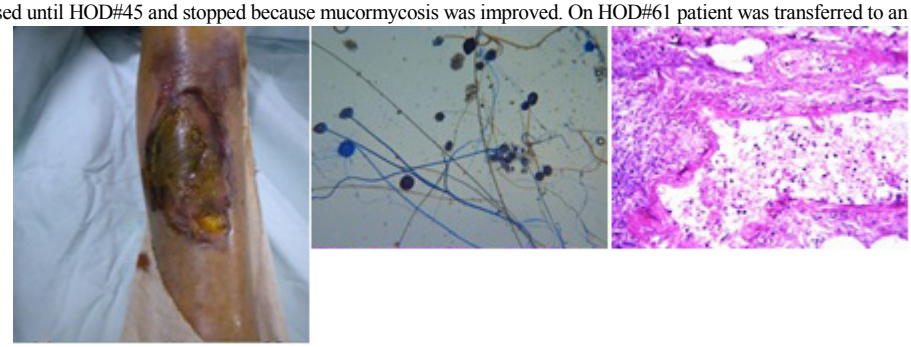
Necrotizing Fasciitis caused by Mucormycosis

Deparment of Internal Medicine, Hong Ik Hospital

*Ji Hwan Park, Eun Gyu Kang, Gyu Cheon Kyung, Hyo Dong An

Mucormycosis is an uncommon opportunistic infection in an immunosuppressive host associated with hematologic malignancy, DM. Frequently involved sites of infection are rhino-orbito-cerebral, pulmonary and skin. We experienced a case of a patient with primary cutaneous mucormycosis in the right tibia with complications of necrotizing fasciitis. 65 year old female uncontrolled DM fell and injured on the rt. shin bone 10 days before. When hospitalized, BP was 130/80 mmHg, HR was 72 (bpm/min), BT was 36.5O C. Tibia was exposed on the front of her rt. shin bone accompanying an abscess on the skin, tibialis ant. muscles and necrotizing tibia (Fig. 1). Initial blood test shows WBC count was 28,200/μL (neutrophil 92%), CRP was 18.61 mg/dL, HbA1c was 13.7%. Lower extremities CT scan showed that bone was possibly protruding, Rhizopus spp. was found from the abscess culture test which was harvested from the lesion while making an incision and drainage.Tazobactam 2.25 g andlevofloxacin 750 mg were administered twice a day before Rhizopus spp. was found on an abscess. Tazobactam and levofloxacin were replaced with amphotericin B 35 mg after mucormycosis was found on the On HOD#21, an amputation of her lower rt. limb was performed. On HOD#26, amphotericin B was replaced with liposomal amphotericin B 150 mg because a microscopic test of tissues on a cross-section from the lower rt. limb showed vascular invasion of Rhizopus. Liposomal amphotericin B was used until HOD#45 and stopped because mucormycosis was improved. On HOD#61 patient was transferred to an old-age home.



An Autopsy Case of Angioinvasive Pulmonary Aspergillosis in a Patient with Severe Neutropenia

[1]Department of Internal Medicine, Korea University College of Medicine, Seoul, Korea, [2]Department of Pathology, Korea University College of Medicine

*Ju Young Lee[1], Youngseok Lee[2], Seung Hee Baik[1], Yoo Ra Lee[1], Se Hyeon Jang[1], Min Ja Kim[1]

Objective: An autopsy case of rapidly fatal, angioinvasive pulmonary aspergillosis in a severe neutropenic patient without underlying disease is reported. **Summary:** A 67-year old man was admitted via emergency department due to sore throat and myalgia for past three days. He had no medical history of hematologic malignancy or other comorbidities, but was told drinking self-made herb extracts. Initial vital signs were BP 60/40 mmHg, HR 88/min, RR 20/min and BT 38.4℃. The lab results showed Hb 7.8 g/dL, WBC 0.19×10^3/μL (ANC 4/μL), platelets 3×10^3/μL, BUN/Cr 22.5/1.63 mg/dL, CRP 254 mg/L, and procalcitonin 48.4 ng/mL. The chest x-ray showed nodulardensities in both lungs. Shortly after, he became dyspneic and was intubated. Under the diagnosis of septic shock probably due to deep neck infection combined with pneumonia, he received piperacillin/tazobactam. On day 2, The neck CT findings demonstrateddeep neck infection with diffuse swelling of hypopharyngeal and laryngeal wall and fluid collection involving carotid, cervical and perivertebral spaces. The Chest CT findings suggested fungal pneumonia. Blood culture reported isolation of Serratia marcescens. The antibiotic was stepped up to meropenem. CRRT was started due to progressive AKI with anuria. On day 5, amphotericin B was administered to target pulmonary aspergillosis. On day 6, he began to show continuous bloody aspirates on tracheal suctions,with aggravated bilateral pulmonary haziness on the chest X-ray. The patient expired with respiratory failure and pulmonary hemorrhage. Autopsy confirmed fungal hyphae with septa and acute branching in the lumina and wall of pulmonary vessels, highlighted on the GMS stain, within the grossly hemorrhagic lesions of the left lung, consistent with angioinvasive aspergillosis. In addition, aplastic bone marrow was identified at autopsy. **Conclusions:** The case is an autopsy proven, fatal angioinvasive pulmonary aspergillosis in a patient with unrecognized severe aplastic anemia. This case emphasizes that a high index of suspicion of systemic mycosis as well as prompt initiation of antifungal agent is recommended particularly in patients with severe neutropenia.