

**Amphotericin-B-liposomal/posaconazole****S****Mixed transaminitis: case report**

A 47-year-old woman developed mixed transaminitis during treatment with amphotericin-B-liposomal and posaconazole for suspected invasive fungal infection [*routes, dosages, outcomes and durations of treatments to reactions onset not stated*].

The woman had a medical history of type 1 diabetes mellitus, mild severe acute coronavirus respiratory virus-2 (SARS-COV-2) two months prior, heart failure with a mildly reduced ejection fraction of 47% and left lower extremity deep vein thrombosis. She presented with a burning sensation of her left hand and altered mental status. She had a low blood pressure and elevated pulse rate. Examination revealed wet gangrene of the left fourth digit. Pertinent laboratory results included leukocytosis, acute kidney injury, and diabetic ketoacidosis (DKA). X-ray of the left hand showed atrophy of the fourth digit with subcutaneous gas. CT scan of the abdomen and pelvis revealed consolidative and reticular opacities in the right lower lung. Subsequent chest CT scan showed a cavitary right lower lobe lesion. She started on piperacillin/tazobactam, vancomycin, and clindamycin for empiric treatment and admitted to the intensive care unit for management of DKA and sepsis from suspected pulmonary and skin/soft tissue infections. On hospital day 2, after resolution of DKA, she was taken to the operating room for amputation of her left fourth digit. Therefore, left wrist disarticulation was performed. Given worsening leukocytosis, antimicrobial coverage broadened to meropenem, vancomycin and doxycycline. She started receiving treatment with amphotericin-B-liposomal [liposomal amphotericin-B] on hospital day 3 due to concern for underlying invasive fungal infection (IFI). Bronchoscopy was performed which demonstrated infiltrates of the right middle and lower lobe with diffuse necrotic tissue with fibrinous clot. A right lower lobectomy was performed through a posterolateral thoracotomy. The treatment with posaconazole was added to her anti-fungal regimen. On further evaluation for dissemination of IFI showed bilateral frontal lobe punctate infarcts on magnetic resonance imaging (MRI) of the brain and a right atrial vegetation with a patent foramen ovale (PFO) on transesophageal echocardiography (TEE). Intraoperatively, a small vegetation was noted, which was suspected to have embolized. The bronchoalveolar lavage cytologic specimen, left hand surgical specimen and right lower lobe surgical specimen, all demonstrated pauciseptate hyphae of a zygomycete and the associated cultures grew a *Rhizopus* species. The hand surgical pathology showed hyphae present around nerves and within vessels, suggestive of vascular spread rather than cutaneous inoculation. She remained stable post-operatively and was transferred to the general medicine floor. However, she was re-admitted to the ICU for hypothermia and hypotension requiring vasopressor support.

The woman had a prolonged hospital course complicated by bilateral pleural effusions, acute metabolic encephalopathy, acute kidney injury, and mixed transaminitis, of which mixed transaminitis was thought to be secondary to the amphotericin-B-liposomal and posaconazole. Eventually, she was diagnosed with disseminated mucormycosis, and she had progressive renal and hepatic dysfunction. Her family decided to discontinue the further treatment. She was transitioned to comfort care and passed away a few days later.