Multiple drugs

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Miliary and disseminated coccidioidomycosis: 2 case reports

In a case series, two men (49 years and 52 years) were described who developed miliary and disseminated coccidioidomycosis following treatment with dexamethasone and prednisone for COVID-19 and glomerulosclerosis. Additionally, the 52-year-old man exhibited lack of efficacy to treatment with fluconazole, amphotericin B, and dexamethasone for miliary coccidioidomycosis [*not all dosages and routes stated*].

Patient 1: The 49-year-old man had tested positive for SARS-CoV-2 infection. He presented to the hospital on the next day. Considering chest X-ray and oxygen saturation he was deemed stable and discharged on unspecified supportive treatment. He had a history of alcohol and tobacco abuse. After six days, he re-presented with fever and shortness of breath. Laboratory investigations revealed decreased oxygen saturation and increased RR and HR. He received nasal oxygen, off-label treatment with convalescent anti SARS-CoV-2 plasma [convalescent plasma] and dexamethasone 6 mg/day for 10 days. Subsequently, his condition improved and he was discharged on day 5 with home oxygen to finish dexamethasone course at home. He completed dexamethasone course and temporarily improved. After 18 days of discharge, he re-presented with shortness of breath, increased cough, night sweats and fever. Oxygen saturation was low and HR was increased; additionally, he had laboured breathing, wheezes and crackles in the left lung base, and decreased bronchovesicular breath sounds in the right lower lobe. Integumentary examination revealed lesions, erythematous macules, verrucous papules and eschars nodules. Skin cultures revealed coccidioidomycosis (CM). The chest x-ray confirmed bilateral miliary nodules and CT scan revealed right middle lobe consolidation and central cavitation; sputum cultures grew *Coccidioides immitis*. He was diagnosed with acute hypoxic miliary CM. The man was treated with amphotericin B and methylprednisolone. Thereafter, he was discharged and continued out-patient care for disseminated CM [*reaction outcome not stated*].

Patient 2: The 52-year-old man had segmental glomerulosclerosis and received prednisone 60 mg/day. He had a medical history of type 2 diabetes mellitus (DM) and chronic kidney disease (CKD). After 10 days of the treatment, he presented with progressive bilateral lower extremity weakness. Vital examination was normal; physical examination revealed paraplegia. Thereafter, he was hospitalised. Axial skeletal MRI revealed leptomeningeal enhancement of the entire spine. He developed fever, disorientation and nuchal rigidity. Brain MRI revealed punctate foci in the bilateral mesial temporal lobes, left midbrain cerebral peduncle, and peripheral right cerebellar hemisphere. CSF culture grew *Coccidioides immitis (C immitis)*. Chest x-ray revealed new diffused miliary nodular densities in both the lungs. CT confirmed bilateral miliary nodules. He was diagnosed with miliary coccidioidomycosis (CM) and CM meningoencephalitis with arachnoiditis which caused his bilateral lower extremity weakness. The man received IV fluconazole 1000 mg/day, IV amphotericin B 5 mg/kg and dexamethasone for 15 days which was gradually tapered detailing, 20 mg/day for days 1 to 7, 16 mg/day for days 8 and 9, 12 mg/day for days 10 and 11, 8 mg/day for days 12 and 13 and 4 mg/day for days 14 and 15. Additionally, he received intermittent haemodialysis for acute CKD. His clinical course was complicated with sepsis and ICU admission. After 42 days of hospitalisation, he was unable to be weaned off mechanical ventilation, received comfort care and died.

Sous R, et al. Two Cases of Miliary and Disseminated Coccidioidomycosis Following Glucocorticoid Therapy and Literature Review. [Review]. Journal of Investigative Medicine High Impact Case Reports 10: Jan 2022. Available from: URL: http://doi.org/10.1177/23247096211051928 803647053