39. CHURG-STRAUSS SYNDROME IN AN HIV-POSITIVE SUDANESE PATIENT: A CHALLENGING TREATMENT CASE

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BACKGROUND: Churg-Strauss syndrome (CSS), also known as eosinophilic granulomatosis with polyangiitis (EGPA), is a rare form of systemic vasculitis characterized by asthma, eosinophilia, and multi-organ involvement. The syndrome primarily affects the lungs, heart, and kidneys. Managing CSS becomes even more challenging in patients with additional comorbidities like chronic kidney disease (CKD) and HIV, particularly when considering the risks associated with immunosuppressive therapy, which is standard for CSS but can exacerbate the immunosuppressed state in HIV-positive individuals. **Case:** A 34-year-old Sudanese male with no history of smoking, except for occasional sheesha use (2-3 times per week for one year), presented with multiple symptoms. The patient had been diagnosed with hypertension four months prior and CKD five months before this presentation, for which he was undergoing regular hemodialysis. He also had a history of asthma diagnosed five months earlier, managed with salbutamol and symbicort nebulizers. His hypertension was controlled with candesartan 16 mg and nifedipine 24 mg daily. The patient reported shortness of breath, particularly exacerbated by exercise, dialysis, and hot weather, which was relieved by Atrovent. He also had a two-week history of fever, primarily during dialysis, along with headache, rigors, a single episode of vomiting, recurrent epistaxis, and weight loss of 5 kg over five months. Additionally, he experienced numbness in both upper and lower limbs, generalized body swelling, and altered bowel habits. **THE CASE**: The patient appeared unwell, distressed, and dyspneic. Physical examination revealed raised jugular venous pressure, bilateral wheezing, fine crackles in the chest, mild lower limb edema, flat feet, and lower limb paresthesia. There was no evidence of pallor, jaundice, purpura, lymphadenopathy, skin nodules, or hemoptysis. Initial laboratory investigations showed anemia, electrolyte imbalances, and significant renal impairment. A chest X-ray revealed interstitial infiltrates with prominent bronchovascular markings. Follow-up tests showed improved hemoglobin levels but persistent renal impairment. Urinalysis revealed red blood cells (RBCs) and pus cells, while malaria was ruled out. **Diagnosis**: Based on the clinical presentation, including the history of asthma, eosinophilia, and multi-organ involvement, the patient was diagnosed with Churg-Strauss syndrome (CSS). Additionally, the patient developed septicemia secondary to an infected permicath catheter, and subsequent HIV testing returned positive. The presence of HIV further complicated the management of CSS, as the standard immunosuppressive therapy posed a risk of worsening the patient's immunocompromised state. The patient received emergency dialysis and broad-spectrum antibiotics, including meropenem and vancomycin, to treat the septicemia. The infected permicath catheter was replaced with an arteriovenous catheter to reduce the risk of recurrent infections. Despite the diagnosis of CSS, immunosuppressive therapy was deferred due to the patient's HIV status, given the increased risk of opportunistic infections. **CONCLUSION:** This case illustrates the complexities of managing Churg-Strauss syndrome (CSS) in a patient with multiple comorbidities, including CKD and HIV. The coexistence of these conditions presents significant therapeutic challenges. This case underscores the necessity of a multidisciplinary approach and tailored treatment plans to optimize outcomes in patients with complex, overlapping medical conditions.

Key Words: Churg-Strauss Syndrome, HIV, Eosinophilic granulomatosis with polyangiitis, Chronic kidney disease, Systemic vasculitis.