

Severe Transaminitis in Allopurinol-Induced DILI presenting as DRESS Syndrome

Dhanushya Battepati^{1*}, Daniel O'Shea¹, Brandon Speedy¹, David Farrow, MD², Megan Karrick, DO¹, Anas Renno, MD¹, Mona Hassan, MD¹

¹Division of Gastroenterology and Hepatology, Department of Medicine, The University of Toledo, Toledo, OH 43614

²Division of Internal Medicine, Department of Medicine, The University of Toledo, Toledo, OH 43614

*Corresponding author: Dhanushya.Battepati@rockets.utoledo.edu

Published: 05 May 2023

Introduction: Patient is an 81-year-old male who presented for significant dyspnea and rash. Further workup demonstrated morbilliform rash, severe transaminitis, elevated alkaline phosphatase, acute kidney injury, and mild eosinophilia.

Case Description: Four weeks prior to admission, the patient was placed on allopurinol for acute gouty arthritis and developed the erythematous, pruritic rash shortly before admission. The rash presented over the trunk and bilateral upper and lower extremities. Patient was given betamethasone cream and Benadryl three times daily with no relief. Upon cessation of allopurinol and initiation of high-dose corticosteroids in the hospital, the transaminitis began resolving within two days and the rash stabilized.

Discussion: We reviewed the PubMed database to identify cases of allopurinol-induced drug-induced liver injury. The patient's LFTs, especially ALT, were significantly higher than the LFTs in a previous case series (median ALT: 500s). This patient's ALT peaked at 1818 U/L, while AST (278) and Alk Phos (339) were also elevated. Liver injury pattern in drug reaction with eosinophilia and systemic symptoms (DRESS) is either cholestatic or hepatocellular. The patient we present demonstrates a hepatocellular pattern of liver injury. In a case series of 16 patients with DRESS and acute liver injury, six patients underwent emergency liver transplantation. It is extremely important to closely monitor LFTs and determine the grade of severity as acute liver failure may manifest, although rare. Overall, this patient presented with severe allopurinol-induced drug-induced liver injury (DILI) with Grade 4 AIDS CTG criteria ALT and AST elevations.