



DAPSONE HYPERSENSITIVITY SYNDROME PRESENTING WITH ACUTE HEPATITIS IN A PATIENT WITH BORDERLINE TUBERCULOID LEPROSY: A CASE REPORT

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ABSTRACT

A 31-year-old female with Borderline Tuberculoid Leprosy developed fever, generalized pruritic rash, facial edema and acute hepatitis on Day 37 of WHO multidrug therapy. Investigations revealed leukocytosis with mild eosinophilia, conjugated hyperbilirubinemia, elevated transaminases and preserved renal function. Infectious work-up was negative. Dapsone was withdrawn and systemic corticosteroids with supportive therapy were administered, resulting in progressive clinical and biochemical recovery. This case highlights the importance of early recognition of Dapsone Hypersensitivity Syndrome (DHS).

KEYWORDS

INTRODUCTION

Dapsone Hypersensitivity Syndrome (DHS) is a rare but potentially fatal adverse drug reaction occurring within 2–8 weeks of initiating dapsone. It is characterized by fever, rash, eosinophilia and internal organ involvement, especially hepatitis.

Case Presentation

A 31-year-old female, known case of Borderline Tuberculoid Leprosy, presented on Day 37 of MDT with fever for four days, generalized pruritic rash, facial swelling, generalized weakness, dysphagia and jaundice. Examination showed diffuse erythematous rash with facial edema and icterus. Laboratory evaluation showed anemia, leukocytosis with mild eosinophilia, peak total bilirubin about 8.9 mg/dL, elevated ALT/AST, hypoalbuminemia and normal renal function. Viral hepatitis markers and leptospira serology were negative. Dapsone was discontinued immediately and the patient received corticosteroids, intravenous fluids, N-acetylcysteine, ursodeoxycholic acid and supportive care. She improved clinically and biochemically during admission.

DISCUSSION

The temporal relationship between dapsone exposure and symptom onset, classical triad of fever, rash and hepatitis, eosinophilia, exclusion of infectious causes and improvement after withdrawal strongly support DHS. Early recognition and corticosteroid therapy are associated with favorable outcomes.

CONCLUSION

Patients receiving MDT for leprosy should be monitored closely during the first two months of therapy. Prompt withdrawal of dapsone and initiation of systemic corticosteroids are essential to reduce morbidity and mortality.

Table 1. Serial Liver Function Tests

Day	Total Bilirubin	Direct Bilirubin	ALT	AST
Admission	7.8	4.9	458	424
Day 3	8.1	4.8	350	242
Day 5	7.0	4.0	354	193
Day 9	4.0	2.1	224	84

Table 2. Hematological Parameters

Parameter	Admission	Lowest/Peak	Discharge
Hb (g/dL)	9.9	7.4	7.7
TLC (/mm ³)	13,000	16,000	7,600
Platelets (lakhs/mm ³)	2.0	3.47	3.47

Clinical Photographs



Figure 1. Facial Edema at Presentation.



Figure 2. Generalized Skin Coloured to Erythematous Maculo Papular Rash Involving Face Trunk and all Extremities



Figure 3. Retro Auricular Maculo Papular Rash



Figure 4. Ocular Examination Showing Conjunctival Involvement

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