UNUSUAL HEPATIC INVOLVEMENT IN ACUTE LYMPHOBLASTIC LEUKEMIA: A CASE REPORT

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INTRODUCTION

Acute lymphoblastic leukemia (ALL) is a hematologic malignancy that primarily involves the bone marrow. It may also affect the central nervous system and, less frequently, infiltrate other organs. Hepatic infiltration is an uncommon manifestation of ALL and can range clinically from asymptomatic presentations to overt liver failure. The literature contains limited information on this form of extramedullary involvement.[1,2]

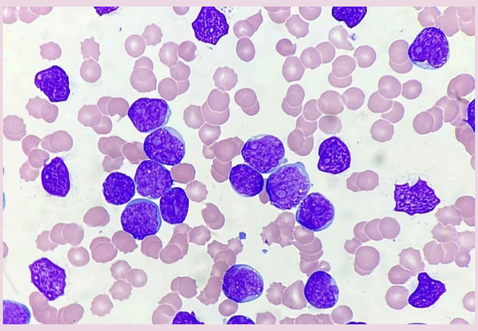
CLINICAL CASE:

We present the case of an 18-year-old male who began experiencing symptoms two months prior to hospital admission, including exertional dyspnea, headache, nocturnal fever, and generalized jaundice. Initial laboratory studies revealed marked liver function abnormalities consistent with a cholestatic pattern: AST 1407 U/L, ALT 1555 U/L, total bilirubin 7.05 mg/dL, and direct bilirubin 5.55 mg/dL.



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A diagnostic workup was initiated, and bone marrow aspiration confirmed B-cell acute lymphoblastic leukemia (CD20+). Due to the hepatic involvement suspected on imaging and labs, a liver biopsy was performed, revealing infiltration by lymphoblasts, with immunohistochemistry positive for CD10, CD99, CD20, and TdT, confirming hepatic involvement by ALL.



BONE MARROW LLA

CONCLUSIONS

Hepatic infiltration is a rare but important manifestation of acute lymphoblastic leukemia. When liver function abnormalities are present in leukemic patients, identifying the underlying cause is essential. In this case, despite the absence of overt liver failure, hepatic dysfunction posed a challenge for initiating chemotherapy. Following protocols described in the literature, high-dose corticosteroids were employed as a cytoreductive strategy, resulting in improved liver function and allowing for the initiation of systemic chemotherapy.[1,2]

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