INTRODUCTION

-Acute kidney injury (AKI) is common in hemophagocytic lymphohistiocytosis (HLH) with an incidence of 62% and renal replacement therapy (RRT) requirement of 59%.

-AKI secondary to bile cast nephropathy (BCN) due to HLH-induced liver failure has not been described but may be an important cause.

CASE DESCRIPTION

-58-year-old man with an unremarkable medical history presented with painless jaundice, fatigue, generalized weakness, cholecystitis, and acholia.

-Vital signs within normal limits. Physical examination showed generalized jaundice, right upper quadrant abdominal pain, hepatomegaly, and abdominal distention.

-Laboratory data: leukocytosis 23,000 10^3/ µL, creatinine 2.5 mg/dL (unknown baseline), AST 1,167 U/L, ALT 1,447 U/L, alkaline phosphatase 215 U/L, total bilirubin 52.7 mg/dL with direct >30 mg/dL, INR 1.2, albumin 3.8 g/dL, ferritin 11,559 ng/mL, and triglycerides 380 mg/dL. Urinalysis showed granular casts.

-Repeat bone marrow biopsy: plasmacytosis and hemophagocytosis diagnostic for hemophagocytic lymphohistiocytosis.

CONCLUSIONS

-BCN is an important cause of AKI in patients with HLH-induced ALF.

-ALF should be suspected in patients with HLH presenting with high levels of hyperbilirubinemia and AKI.

-A high index of suspicion is needed to diagnose BCN since the diagnosis can only be confirmed by renal biopsy.

-Pathology in BCN shows bile stained casts and a positive Hall’s stain for autoimmune hepatitis and cholangitis.

-Discussion: RRT plays a crucial role in management of BCN and should be considered if BCN is suspected.

REFERENCES


