A Case of Nodular Regenerative Hyperplasia with Rapid Progression To Liver Failure

Alan Gonzalez, MS, MPAS, PA-C; Adrianna Anderson MMS, PA-C
Division of Hospital Internal Medicine
Mayo Clinic, Phoenix, AZ

Introduction

Nodular regenerative hyperplasia (NRH) is a rare intrahepatic microvascular disorder in which an altered perfusion state transforms normal liver structures into nodules. Chronic use of thiopurines, chemotherapy, and antiretrovirals may contribute to development of NRH. NRH has also been linked to solid organ transplantation, autoimmune disorders, and diseases with recurrent vascular and infectious complications. Clinical presentation can be insidious as liver function tests can be normal. Though rare, NRH is an important disease process for clinicians to be aware of as it can cause significant symptoms of portal hypertension and liver failure in patients.

Description

57-year-old male with a history of end stage renal disease secondary to adenine phosphoribosyltransferase deficiency, status-post kidney transplant presents with abdominal distension and diarrhea. CT abdomen revealed ascites. He was diagnosed with campylobacter colitis and the ascites was thought to be reactive to the infection. He underwent paracentesis and improved with antibiotics. Unfortunately, his ascites recaccumulated multiple times in the following months despite confirmed campylobacter eradication. Serum-ascites albumin gradient was consistent with portal hypertension. A transjugular liver biopsy found an elevated hepatic portal venous gas and pathology consistent with NRH without cirrhosis. He also developed encephalopathy, requiring multiple hospitalizations due to pan-colonic ulcers of uncertain etiology. Approximately 9 months after the initial onset of symptoms he presented with a GI hemorrhage and worsening liver function. He became uncertain etiology. Approximately 9 months after the initial onset of symptoms he presented with a GI hemorrhage and worsening liver function. He became

Discussion

Treatment of NRH includes managing the stigmata of portal hypertension, addressing the underlying contributing disorder, and removal of etiologic agents. Liver failure from NRH is rare. The patient had been on mycophenolate and tacrolimus for his transplant, but these are not known to address the underlying contributing disorder, and removal of etiologic agents. Liver failure from NRH is rare. The patient had been on mycophenolate and tacrolimus for his transplant, but these are not known to

References