De novo Crohn's post Liver Transplantation: A rare case

S Srinivasan

Citation

S Srinivasan. *De novo Crohn's post Liver Transplantation: A rare case*. The Internet Journal of Gastroenterology. 2007 Volume 6 Number 2.

Abstract

Immunosuppressive therapy is well established for treating inflammatory bowel disease (IBD). However we present a patient who developed IBD while on sufficient immunosupression.

CASE REPORT

A 25-year-old Caucasian female presented to the Gastroenterology service with a three months history of new onset diarrhoea associated with blood and mucus. The frequency was up to 4 to 8 times a day. She also experienced vomiting along with abdominal cramps which was relieved by passing stool or flatus. She also reported weight loss in this period. Two days prior her admission she developed a rash on both her legs along with arthralgia in both ankle joints. There was no associated fever, mouth ulcers, dysuria or any eye symptoms.

Her past medical history included Orthotopic liver transplantation (OLT) for Cryptogenic

Familial cirrhosis and Hepatocellular carcinoma (HCC) at the age of14 years. She was a cytomegalovirus (CMV) negative recipient, and remained on dual immunosupression for some time following an episode of late rejection 3 years post transplant. Her medications on admission were Cyclosporine 50mg BD and Azathioprine 50mg OD. She had no family history of inflammatory bowel disease (IBD).

On examination the pulse was 95 regular, blood pressure 132/95 mm Hg and she was afebrile. Abdominal examination revealed tenderness on the left iliac fossa with perianal ulcerations and skin tags. Erythema nodosum was present on the lower extremities.

CRP was elevated at 123mg/L and albumin was 27g/L. Stool and urine cultures were negative. The cyclosporine level was within therapeutic range.

Flexible sigmoidoscopy showed features of severe colitis with multiple aphthous ulcers in upper rectum and sigmoid colon. Abdominal ultrasound showed thickening of sigmoid colon to splenic flexure and rest of her colon and terminal ileum appeared normal.

She was started on intravenous steroids and oral metronidazole to and was also given intravenous ganciclovir for possible Cytomegalovirus colitis. Subsequently CMV infection was excluded with a negative IgM and IgG antibodies and a negative polymerase chain reaction (PCR). Also Immunohistochemical staining from rectal biopsy did not show any CMV inclusion bodies or fungal hyphae on special stains..

Rectal and sigmoid biopsies were consitent with crohn's disease.

She improved with steroids and was discharged on Azathioprine 150mg OD and a red tapering course of oral steroids. Flexible sigmoidoscopy six weeks later showed healing/healed bowel disease.

DISCUSSION

De novo development of IBD in patients with sufficient allograft immunosuppressive therapy following OLT for familial cirrhosis although very rare, have been reported in literature. In one study looking at 314 liver transplant recipients, Worns M A, et all [1] reported 5 patients with had de novo development of IBD following transplantation for causes (including cryptogenic cirrhosis) other than PSC in spite of adequate immunosuppressive therapy. CMV infections post liver transplantation have also been implicated in the de novo development of crohn's[2]. In our case, there was however no proven infection with CMV. This case identifies a need for a better understanding of the pathogenesis of bowel disease and any possible association or correlation with the duration of immunosupressive[3]

therapy.

References

1. Worns MA, Lohse AW, Neurath MF, Croxford A, Otto G, Kreft A, Galle PR, Kanzler S.
Am J Gastroenterol. 2006 Aug;101(8):1931-7. Epub 2006 Jun 22
2. Verdonk RC, Haagsma EB, Van Den Berg AP, Karrenbeld A, Slooff MJ, Kleibeuker JH, Dijkstra G. Scand J Gastroenterol. 2006 Feb; 41(2):205-11.
3. Vu F, Maillard M, Pascual M, Michetti P, Felley C. Gastroenterol Clin Biol. 2006 Aug-Sep;30(8-9):1096-101.

Author Information

Sridhar Srinivasan, MRCP(UK)
Queen Alexandra Hospital