Epstein-Barr Virus Mucocutaneous Colonic Ulcer in an Immunocompetent Patient.

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Epstein Barr Virus Mucocutaneous Colonic Ulcer in an Immunocompetent Patient

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INTRODUCTION

- Epstein Barr Virus (EBV) positive mucocutaneous ulcers (MCU) were first described in 2010 in immunosuppressed patients occurring in the mouth, skin, and GI tract[1]
- Lesions are described as shallow, sharply circumscribed mucosal or cutaneous ulcers[2]
  - Histology notes polymorphous infiltrates of lymphocytes and immunoblasts with EBER1-positive features[2]
- Typically EBVMCU are treated conservatively, and resolve with reversal of immunosuppression[1,2,3]
- Some reports have described an association with disseminated Hodgkin's Lymphoma and diffuse large B-cell lymphomas (DLBCL)[2,3]
- We report a case of an EBVMCU discovered in an immunocompentent patient superimposed with acute campylobacter colitis with serologic evidence of recent EBV infectious mononucleosis

CASE REPORT

- A 47 year-old male with no PMH presented with a 1-month history of bloody diarrhea with a recent development of pharyngitis with flu-like symptoms 1 week prior
- Physical exam noted pharyngeal erythema, symmetrical bilateral cervical lymphadenopathy, and diffuse abdominal tenderness
- Admission labs were significant for a normal hemoglobin, leukocytosis with a lymphocytic predominance, and LFT abnormalities
- CT of his abdomen and pelvis revealed circumferential rectal wall thickening with stranding in the setting of diffuse abdominal lymphadenopathy, splenomegaly, and multiple hepatic lesions. Radiographically concerning for malignancy
- Serum AFP, CEA, CA 19-9 were within normal limits. HIV screen were negative. Fecal calprotectin was noted to be over 830ug/g
- Further evaluation with a hepatic MRI noted liver cysts. Stool cultures were positive for Campylobacter
- He was treated with azithromycin however symptoms persisted
- Colonoscopy revealed several clean-based ulcers within the rectum and sigmoid colon (Figure 1)
- Biopsies were positive for EBVMCU (Figure 2). Serum EBV serologies indicated recent EBV infection
- Symptoms eventually improved and patient was discharged in stable condition with recommended outpatient follow-up

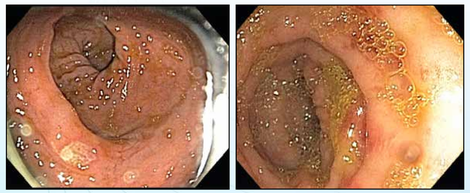

Figure 1: Colonoscopy acquired images depicting several clean based rectal ulcers

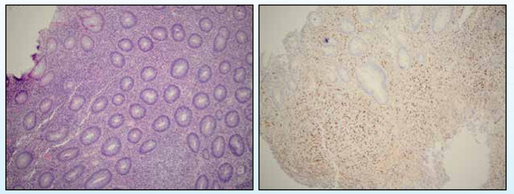

Figure 2: (Left) H&E stain of rectal ulcer noting colonic mucosa with dense lymphoplasmacyctic infiltrate. (Right) EBV in situ hybridization indicating presence of EBV DNA within the nuclei of infected cells.

DISCUSSION

- As of April 2016, 51 cases of EBVMCU has been described in the literature[2]
  - 5 cases described colonic involvement
- All reports have been associated with immunosuppression by either medication or age-related immunosenescence in patients over the age of 60[2]
- The majority of cases were self-limited and resolved with reversal of immunosuppression. Rare cases were treated with Rituximab or with surgical resection. One case was treated with chemotherapy (R-CHOP) however all cases reported complete remission[3]
- Described here is a rare case in which a colonic EBVMCU was discovered within a young otherwise healthy male during acute campylobacter colitis with serologic evidence of recent infectious mononucleosis
- Although in previous literature, EBVMCU were reported to fall within the spectrum of EBV-associated proliferative disorders, the 2016 WHO update of the classification of lymphoid neoplasms have recognized EBVMCU as a separate entity from EBV positive DLBCL due to their observed self-limited growth and response to conservative management[2,4]

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