

# Triangle of Lymphocytic Colitis, Epstein-Barr virus, and Lymphoma. Is There Any Association?

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## Introduction

EBV is linked to lymphoproliferative lesions and malignant lymphomas of B-, T- and NK-cell origin.

EBV+ diffuse large B cell lymphoma (DLBCL) not otherwise specified is a variant of DLBCL seen in patients without immunodeficiency or lymphoma.

Some reports found increased association of EBV with Microscopic Colitis (MC), but it is unclear if this translates to higher incidence of lymphoma in this subgroup of people.

Here, we describe a case of DLBCL in patient with MC associated with EBV infection in context of new literature.

## Case Presentation

77-year-old female with h/o COPD, DM underwent colonoscopy for chronic diarrhea.

Celiac serology, fecal elastase, and infectious workup was unremarkable.

Colonoscopy showed 4 mm Paris Is polyp in sigmoid colon.

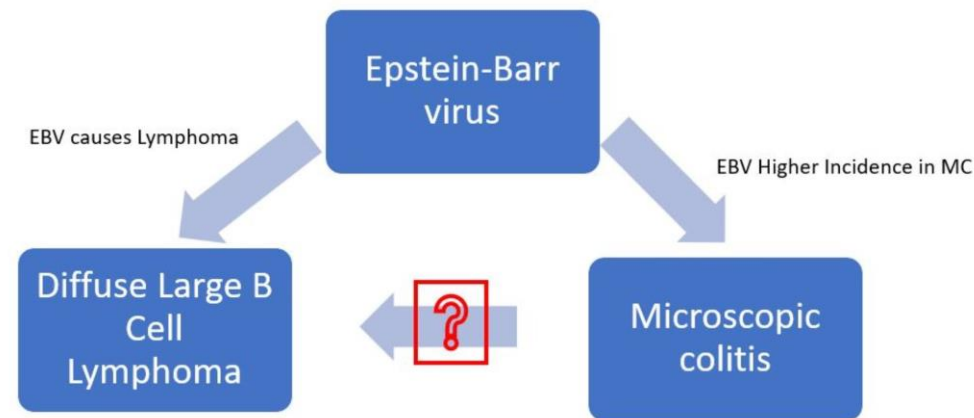
Random colonic biopsies revealed lymphocytic colitis and polyp showed DLBCL (non-germinal center phenotype) with positive EBV infection



## Discussion

It is believed that overall risk of malignancy is not increased in MC. Theoretically, MC should increase risk of lymphoma as it is more likely to be associated with oncogenic EBV than UC or IBS (90 % vs 66 % vs 0 %) and EBV increases the risk of lymphoma due to protein expression in infected lymphocytes resulting in immune evasion, apoptosis suppression.

Recent study from Swedish Cancer Register (Bergman et al. 2021) included 11758 patients with incident MC and found an increased risk of lymphoma (adjusted HR 1.43 [1.06–1.92]).



Studies are needed to explore risk of lymphoma in subgroup of MC patients with EBV infection as inflammation cause by MC and concomitant EBV infection enhance the overall malignant potential.

In conclusion, MC may not be as benign entity as it was once thought to be as it is more likely to harbor oncogenic EBV virus.

Even diminutive polyps in MC can potentially harbor lymphoma and should be removed and submitted for analysis and not discarded.