



One Case of Epstein–Barr Virus Encephalitis from Pediatric Crohn’s Disease After 6-Mercaptopurine and Infliximab Treatment

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To the Editors,

We report a 12-year-old Chinese boy diagnosed with Crohn’s disease according to the European Society of Pediatric Gastroenterology, Hepatology and Nutrition Revised Porto Criteria (Fig. 1) [1], who was diagnosed with Epstein–Barr virus (EBV) encephalitis after prior treatments with 6-mercaptopurine and infliximab. Initial symptoms included headache, vomiting, and convulsions accompanied by a low-grade fever. EBV-DNA in cerebrospinal fluid and Early Antigen (EA)-IgG in serum were positive (Fig. 2). Based

on his symptoms and laboratory evaluation, he was diagnosed with EBV encephalitis and fully recovered after supportive treatment. This case illustrates that pediatric CD patients who have received immunosuppressants and biologic therapy may be susceptible to severe complications of viral infections, including EBV encephalitis [2]. Whether immunosuppressants and biologics facilitate EBV delivery across the blood–brain barrier remains unknown.

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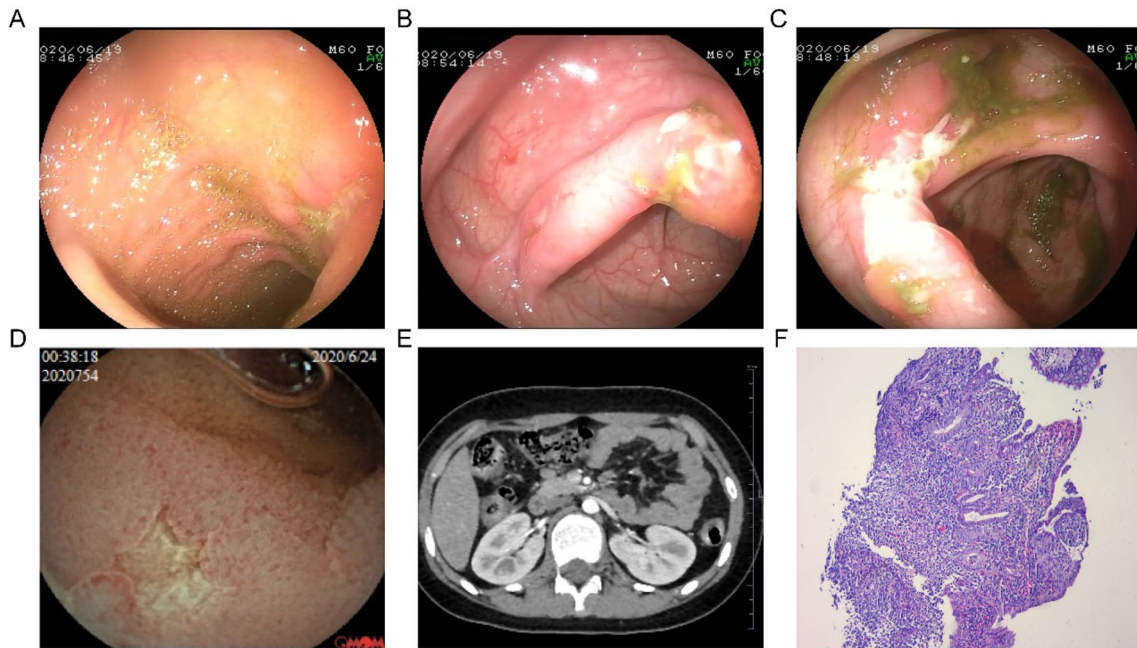


Fig. 1 A–C Representative endoscopy photograph of the lesion in colon. **D** Representative capsule endoscopy photograph of the lesion in small intestine. **E** Representative enhanced computed tomographic (CT) scan of the gut. **F** Biopsy showing ulcer and chronic inflammation

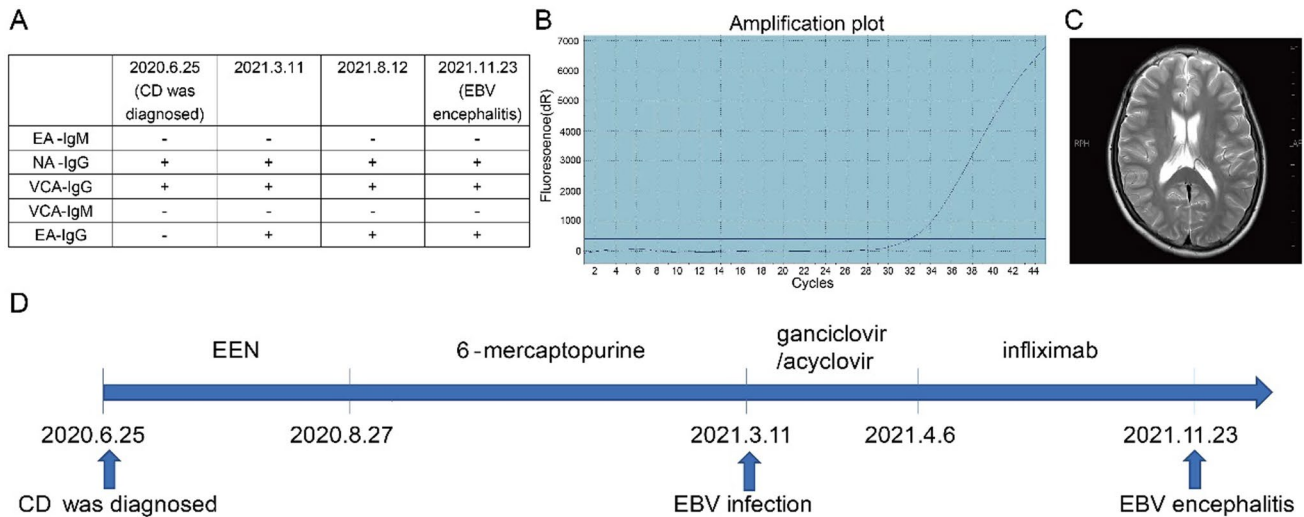


Fig. 2 **A** Expression levels of serum EA-IgM, NA-IgG, VCA-IgG, VCA-IgM, EA-IgG from the patient at different time points. *CD* Crohn’s disease, *EBV* Epstein–Barr virus, *EA-IgM* anti-early antigen immunoglobulin M, *NA-IgG* anti-viral nuclear antigen immunoglobulin G, *VCA-IgG* anti-viral capsid antigen immunoglobulin G, *VCA-IgM* anti-viral capsid antigen immunoglobulin M, *EA-IgG* anti-early antigen immunoglobulin G. **B** Amplification curve of reverse trans-

cription quantitative real-time polymerase chain reaction (RT-qPCR) reaction targeting the EBV DNA in cerebrospinal fluid samples. The number of cycles (Ct) was 32.11 and EBV DNA was 2.13×10^3 copies/ml. **C** Representative magnetic resonance imaging (MRI) of the brain. **D** Schematic illustration for the treatment of the patient before EBV encephalitis

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