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EBV-positive mucocutaneous ulcer — Only in immunosuppressed patients?

Flor María Fernández-Gordón Sánchez¹, María Arranz Álvarez¹, Justino Jiménez Almonacid² and Carmen García-Ramos García¹

Departments of ¹Gastroenterology and ²Pathology. Hospital Universitario 12 de Octubre. Madrid, Spain

Correspondence: Flor M. Fernández-Gordón Sánchez

e-mail: florfgs@hotmail.com

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Dear Editor,

We report the case of a 42-year-old male without a previous medical history who presented with hematochezia, tenesmus, and weight loss over two months. An ulcerated lesion located on the pectineal line, covering the entire circumference, was identified by colonoscopy. Histologically, there was a lymphoplasmacytic infiltrate and histiocytes with atypical Hodgkin-like lymphoid cells, and the immunohistochemistry tested positive for EBV (1). Random biopsies of the colorectal mucosa were normal. Thus, the patient was diagnosed with Epstein-Barr virus mucocutaneous ulcer (EBVMCU).

Furthermore, there were no findings in a complete blood test and thoraco-abdominal-pelvic CT scan. An assessment with the Hematology department ruled out a

lymphoproliferative process or other immunosuppressive factors. The lesion persisted at the 6 month follow-up visit, with a histopathological diagnosis of carcinoma with high-grade dysplasia and coinfection with human papillomavirus (HPV) and EBV.

EBVMCU is a localized condition of the oropharynx, skin, or gastrointestinal tract (1). Its pathogenesis remains uncertain and has recently been added to the spectrum of B-cell lymphoproliferative disorders. It has been described in the context of immunosuppression, including immunosenescence, accomplishing spontaneous regression if immunosuppression improves (2).

Regarding its clinical evolution, HPV/EBV viral coinfection in anal cancer is rare, being present in 16 % of cases according to a recent study (3). EBV infection seems to facilitate HPV latency and has been described as a co-factor in HPV-related carcinomas. In addition, under certain circumstances, HPV might shift EBV from a latent to a replicative state (4,5).

The reported case brings together an atypical presentation of EBVMCU in an immunocompetent patient with viral coinfection of anal cancer. Further scientific evidence is needed in order to assess EBVMCU endoscopic follow-up, and to understand the clinicopathological significance of viral coinfection in anal cancer.

REFERENCES

1. Rodríguez Lorenzana P, García Gómez E, Primo Romaguera V, et al. Úlcera de canal anal por virus de Epstein Barr, a propósito de un caso. CIR ESP 2020;98(Espec Congr 1):678.
2. Ikeda T, Gion Y, Yoshino T, et al. A review of EBV-positive mucocutaneous ulcers focusing on clinical and pathological aspects. J Clin Exp Hematop 2019;59(2):64-71. DOI: 10.3960/jslrt.18039
3. Gupta I, Al Farsi H, Jabeen A, et al. Virus del papiloma humano de alto riesgo y virus de Epstein-Barr en el cáncer colorrectal y su asociación con el estado clínico-patológico. Patógenos 2020;9(6):452. DOI: 10.3390/patogenos9060452

4. Makielski KR, Lee D, Lorenz LD, et al. Human papillomavirus promotes Epstein-Barr virus maintenance and lytic reactivation in immortalized oral keratinocytes. *Virology* 2016;495:52-62. DOI: 10.1016/j.virol.2016.05.005
5. de Lima MAP, Teodoro IPP, da Silva CGL. Role of Epstein-Barr Virus and Human Papillomavirus Coinfection in Oral and Anogenital Carcinogenesis: Potential Tumorigenic Pathways. *Crit Rev Oncog* 2019;24(4):403-13. DOI: 10.1615/CritRevOncog.2020033071

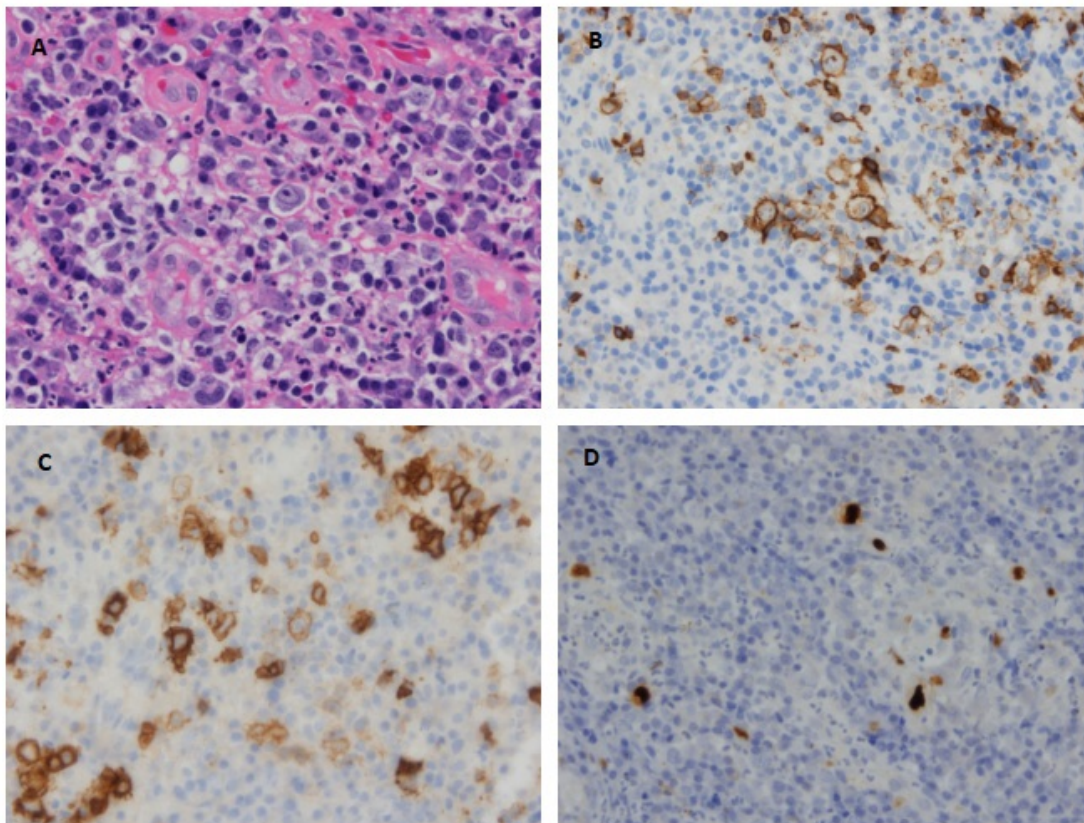


Fig. 1. Histopathology of a mucocutaneous ulcer by Epstein-Barr virus. A) Hematoxylin-eosin, x400. B) Immunohistochemistry for CD20, x400. C) Immunohistochemistry for CD30, x400. D) Immunohistochemistry for EBER, x400.