Serological status of inflammatory bowel disease patients before starting biological therapy - data from a tertiary centre of the best vaccined country

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To the Editors,

We have read with great interest the recently published paper by Martinelli et al. about poor immunization status of children with the diagnosis of Inflammatory Bowel Disease (IBD) and about insufficient serological testing before starting biological therapy (1). The use of immunomodulators and biological therapy is associated with increased risk of opportunistic infections and the flare-ups of latent infections. With the increased use of these therapies, altered immunological status challenges physicians during the management of patients with IBD.

Fortunately, guidelines and recommendations are already available relating to the screening and vaccination of IBD patients (2). Hungary is a positive model country in vaccination, as owning the first place in the "Percentage of children at 1 year of age vaccinated for diphtheria, tetanus and pertussis, measles and hepatitis B, 2018" list according to the OECD Health Statistic 2019 (3). Our strict regulation for mandatory vaccination among children could contribute to the later sufficient immunization and therefore to prevent new infections and avoid unnecessary flare-ups. Reading the disappointing results of the multicentre pediatric study, we

would like to reveal the importance of rigorously controlled immunization status in the immunomodulated adult population.

In our Centre – First Department of Medicine, University of Szeged, Hungary –, we routinely screen IBD patients' immunization status before starting biological therapy. Firstly, we exclude the possibility of latent tuberculosis with X-ray and in case of high-risk patients, with the gold standard quantiferon TB test also. After that, we estimate other infections' potential occurrence as well. Here, we summarize our results in respect of some vaccine-preventable diseases and opportunistic infections. Sixty-seven IBD patients were involved in our analysis who started biological therapy. Forty-nine patients (73%) had seropositivity for Cytomegalovirus and 64 patients (95.5%) for Epstein-Bar virus infection. As expected, lower seroprotection rate was observed in case of Hepatitis B virus (30 patients, 44.8%), as mandatory vaccination against it was only initiated in 1999. Sixty-one patients (91%) had seroprotection for Rubella and Morbilli, both vaccines were initiated before 1999. For completeness, none of the patient had Hepatitis C virus infection.

Our data highlighted that mandatory vaccination protocols beneficially effect seropositivity by more than 90%. In contrast, delayed regulation and consequent insufficient immunization can challenge the IBD centres. Therefore, every biological centre has to suit the following two requirements: to check the immunological status of patients who start immunosuppressive or biological therapy, and to be up-to-date in the current national vaccination guidelines.

References:

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