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LETTER TO THE EDITOR

Family history in early-onset inflammatory bowel disease

Anna Monica Bianco · Valentina Zanin · Lorenzo Monasta · Stefano Martelossi · Annalisa Marcuzzi · Sergio Crovella

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Kuwahara and colleagues [1] recently published in your journal an original paper entitled "Effects of family history on inflammatory bowel disease (IBD) characteristics in Japanese patients". Ulcerative colitis (UC) and Crohn's disease (CD) are the two main forms of IBD. Both UC and CD are complex and heterogeneous multifactorial diseases in which both hereditability and environment (behavioral and microbial factors) contribute to the development of the diseases [2]. Kuwahara et al. [1] performed an epidemiological study considering present age, age at disease onset, and family history (FH) in Japanese IBD patients. The authors clearly show that in some aspects the characteristics of IBD vary according to the presence or absence of FH. In particular, in patients with UC, present age and age at disease onset were significantly lower if they had an FH. This result was not observed in patients with CD.

Regarding the lack of association between FH and age at disease onset in CD patients, however, it should be noted that the study did not include patients with very early-onset CD (before 5 years of age), which might represent an interesting group of patients for the study of FH and age at disease onset.

In our experience [3, 4] in the case of very early-onset CD, Mendelian genetics, linkage analysis, and familial studies can contribute to the identification of new private mutations and novel candidate genes. Otherwise, by considering CD as a complex condition, other approaches based on association studies in populations have been commonly adopted to evaluate the incidence of the disease.

Furthermore, the samples of UC and CD cases analyzed by Kuwahara and colleagues were heterogeneous not only in terms of numbers of patients considered (46,114 cases of UC and 11,305 cases of CD), but in particular in the distribution of younger ages, which is crucial for understanding the role of FH.

In conclusion, we found the study results to be very interesting. We believe, however, that studying the FH of very early-onset CD may provide significant help to clarify the role of the genetic component in the onset of CD. In our opinion the power of genetic studies increases when focusing on children, as they show higher gene dosage effects [5] and fewer environmental influences [6].

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A. M. Bianco (✉) · V. Zanin · L. Monasta · S. Martelossi · A. Marcuzzi · S. Crovella
Institute for Maternal and Child Health, IRCCS "Burlo Garofolo", Trieste, Italy
e-mail: bianco@burlo.trieste.it

S. Crovella
University of Trieste, Trieste, Italy