LETTER TO THE EDITOR

Comments on "Role of intestinal microbiota in the development of multiple sclerosis"*

Comentario del artículo «Papel de la microbiota intestinal en el desarrollo de la esclerosis múltiple»

Dear Editor,

It was with great interest that we read the review article by Drs Castillo-Álvarez and Marzo-Sola on the role of intestinal microbiota in the development of multiple sclerosis. Their study constitutes a valuable contribution to the literature addressing the role of gut microbiota in multiple functions of the human body, especially immune response. However, we feel that the authors have not mentioned some of the topics addressed in other studies conducted by Spanish researchers and published in international journals. With a view to enriching the discussion and reflections on the role of microbiota in multiple sclerosis, and more specifically to complementing, if possible, the outstanding article by Castillo-Álvarez and Marzo-Sola, we will address the omitted subjects, particularly the association between Candida species and multiple sclerosis.

The human microbiota has been reported to host some yeast species of the Candida genus. Furthermore, several studies have suggested a link between cow milk and multiple sclerosis and it is a well-known fact that yeasts of the Candida genus can be isolated from some dairy products. Likewise, some rare cases of acute zonal occult outer retinopathy associated with multiple sclerosis and infections due to Candida species have been described in the literature. These observations led us to hypothesise that Candida species may be associated with multiple sclerosis. In that study, we obtained blood samples from 80 patients with multiple sclerosis and 240 age- and sex-matched controls. According to our results, presence of Candida antigens was significantly associated with multiple sclerosis. More specifically, odds ratios (95% CI) were as follows: 2.8 (0.3-23.1; P = .337) for Candida famata, 1.5 (0.7-3.4; P = .290) for Candida albicans, 7.3 (3.2-16.6; P < .001) for Candida parapsilosis, and 3.0 (1.5-6.1; P = .002) for Candida glabrata. Results were similar after excluding those patients receiving immunosuppressants. These findings led us to conclude that presence of Candida antigens was associated with increased risk of multiple sclerosis. Although the significance and scope of our results is difficult to determine, they lay the foundations for further research into this topic.

In any case, we wish to congratulate Castillo-Álvarez and Marzo-Sola on their excellent study and look forward to meeting them at a medical conference to further discuss these topics in person.

References


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