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ALCAT® test and dysbiosis: A new insight

Aim: The objective of the study was to evaluate whether food intolerance is associated with an intestinal dysbiosis.

Method: 77 patients (122 females, 54 males, 36.5 average age) positive for dysbiosis test were tested by food intolerant test ALCAT®. Dysbiosis test is considered positive when at least one of the parameters considered (named INDICANO and SCATOLO, both tryptophan metabolites) exceeds 10 µg/L (mild dysbiosis). The dysbiosis diagnosis ranges used were: between 10 and 20 µg/L (mild dysbiosis), between 20 and 40 µg/L (medium dysbiosis), greater than 40 µg/L (severe dysbiosis). The ALCAT® test is an automated cytotoxic test for intolerance that electronically measures volumetric shift in blood cells following incubation with food antigens. The degree of reactivity was determined by comparing a baseline distribution curve against the distribution curve generated by the analysis of each test agent/blood sample and by calculating the absolute

differences between curves and the standard deviation (SD).

Results: Patients with a mild dysbiosis, uniquely determined by values between 10 and 20 µg/L of the INDICANO parameter, exhibit higher degree of reactivity compared to patients with a diagnosis of severe dysbiosis (both parameters higher than 40 µg/L).

Conclusion: This study provides evidence than in the presence of a limited alteration of the intestinal permeability, a reaction to food antigens (via ALCAT® test diagnosis) can be more severe in patients with greater intestinal permeability condition.

Biography

Pierluigi Pompei has completed his PharmD in 1988 at the University of Camerino and his PhD degree in 1994, at the University of Ancona, Italy. He is currently Associate Professor in the Unit of Pharmacology of the University of Camerino, where he is Head of the Lab of Pharmacology and Sport Nutrition, and Head of the County Marche for the SANIS (School of Sport Nutrition).

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