

Altered Intestinal Permeability in Patients with food allergy to Lipid Transfer Proteins



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Background

Allergy to lipid transfer proteins (LTPs) is the most common food allergy in adults in the Mediterranean area. As a continuation of a pilot study, we investigate the role of intestinal permeability in adults with food allergy.

Objectives & Methods

The objective of this study is to evaluate intestinal permeability (IP) in patients with allergy to LTP with different clinical manifestations and severity. Patients with allergy to LTP (clinical presentation, positive skin test and specific IgE) were included. The presence of impaired IP was studied by D-xylose breath test. Non-allergic comorbidities that could influence intestinal permeability were also assessed by serum and stool analysis. The same evaluation was performed to a control group. Nineteen patients, 84% women, mean age 37 (21-56) and 6 female controls, mean age 36 (23-50) were recruited.

Results

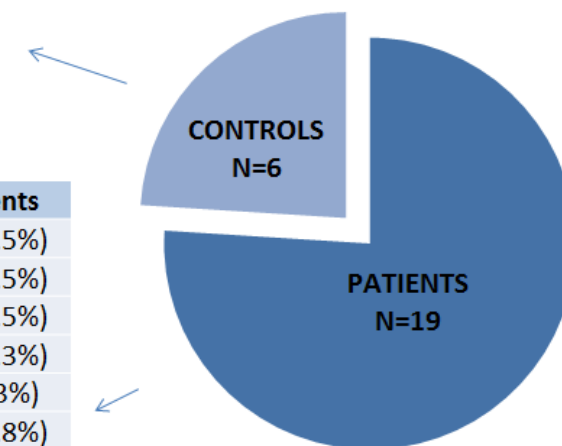
Table 1. Impaired Intestinal Permeability

D-Xylose Breath Test	Positive	Negative	Inconclusive
Patients	12 (63%)	5 (26.5%)	2 (10.5%)
Controls		6 (100%)	

Graphic 1. Results of gastrointestinal pathogens

Pathogen	Control
Blastocystis spp	4 (67%)
No infection/infestation	2 (33%)

Pathogen	Patients
Helicobacter pylori	2 (10.5%)
Giardia intestinalis	2 (10.5%)
Blastocystis spp	2 (10.5%)
H. pylori + G. intestinalis	5 (26.3%)
H. pylori + Blastocystis spp	1 (5.3%)
G. intestinalis + Blastocystis spp	3 (15.8%)
No infection/ infestation	4 (21.1%)



Conclusions

Patients with LTP allergy and gastrointestinal symptoms show an impaired intestinal permeability test as well as gastrointestinal infections/infestations. The relationship between these factors and the clinical manifestations of LTP is yet unknown.