Reviewer's report

**Title:** IgG and IgG4 antibodies in subjects with irritable bowel syndrome: a case control study in the general population

**Version:** 1  **Date:** 20 August 2012

**Reviewer:** Thierry PICHE

**Reviewer's report:**

This paper is a negative study showing no association between IBS symptoms and IgG (4) against food. The topic is of interest since food intolerance seems to play a role in the pathophysiology of IBS symptoms. Authors have chosen to point out the role of late allergic phase using IgG against food.

The paper is well written and presented although there is some limitations that need to be clarify:

**Major points**

The major point relates to the presentation of data that should be stratified between IBS subtypes. In fact, taking IBS as a whole group includes the risk to mask a putative association since the pathogenic role of allergic factors seems to be more stringent in IBS patients with diarrhea predominance.

It is also important to better detail how was performed the diagnosis of IBS. Did patients only answered to questionnaires at a time or IBS diagnosis was done during a medical visit in the past?

In this line, did patients had colonoscopy with histologic analysis to exclude microscopic colitis or colitis associated with mucosal mast cell/eosinophils increased numbers?

The frequency of atopy and allergic rhinitis was slightly higher in IBS patients, confirming the importance to separate between IBS subtypes and to test the analysis also in patients having allergic symptoms.

**Minor points**

The possibility of cross reactivity between other major antigens coming from diet but also inhalants should be briefly added in the discussion section.

The hypothesis of using IgG4 against food as IBS predictors needs to be softened because of the complexity of various allergic responses/phases except IgG4 and also cross reactivity between multiple antigens that are both possibly involved in the pathophysiology of IBS. Therefore data in table 2 are not surprising and should be limited in the manuscript only.

Details concerning medications (histamine antagonist, mast cell stabilizers), IBS duration, origin of IBS (post-infective?), exclusion of celiac disease should be
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests