

Letter to the editor

Do only live larvae cause *Anisakis simplex* sensitization?

A recent paper in *Allergy* (1) describing the prevalence and risk factors for IgE sensitization to *Anisakis simplex* in Galicia, Spain, showed that only 0.43% of a large adult sample was sensitized and stated that sensitization is only possible by live larvae. This seroprevalence is lower than previously reported in Spain (2) and elsewhere (3).

As part of an ongoing investigation involving children and adolescents (6–18 years) routinely observed at a Health Unit in Porto, Portugal (an area close to Galicia), we evaluated 53 participants, free of allergic diseases, using prick-tests (2 mg/ml of *A. simplex* extract) and specific IgE determinations using a fluoroenzymeimmunoassay (CAP-FEIA system, UniCAP® – Pharmacia). Sensitization was considered to be present when the prick-test wheal diameter was larger than the negative control (by at least 3 mm) and/or when the IgE level was higher than 0.7 kU/l.

Sensitization prevalence was 7.5% (95% confidence interval (95% CI) 2.44–17.2) and 3.8 (95% CI 0.64–11.9) for the prick-test and IgE determination, respectively.

Our prevalence estimates, based on a small sample size, are clearly larger than those found in a population with a similar genetic background. Plausible explanations for this might be the differences in eating habits and fish intake, cohort effects or differences in test performances.

In Portugal the consumption of raw fish is unusual especially in the paediatric population. Therefore, cultural differences concerning fish consumption (4) could account for a higher probability of sensitization in Spain.

We cannot exclude the hypothesis of a cohort effect, responsible for an increased prevalence in younger generations, as in our sample, although there is no epidemiological evidence to support this.

In our sample overestimation due to lack of specificity is unlikely. The CAP-FEIA system showed low cross-reactivity with *Ascaris* (5,6) and we used a conservative cut-off point (0.70 kU/l). The point estimate of sensitization prevalence obtained by prick-test is included in the 95% CI for specific IgE.

The superiority of the capture ELISA method over CAP-FEIA system or prick-

tests remains to be proven. This method may not detect lower specific IgE levels and the higher risk of sensitization related to raw fish consumption might result from higher IgE levels in raw fish consumers.

Sensitization to *A. simplex* caused only by live larvae is not supported by our findings. Further studies are needed for a better understanding of the role of *A. simplex* sensitization and its importance as a major allergen to public health.

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