Food reintroduction pattern in children with complex gastrointestinal food allergy

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Background
Gastrointestinal food allergy (GIFA) is a common condition in paediatric age and both IgE-mediated and non-IgE-mediated reaction are well recognised underlying mechanisms involved in its pathogenesis. Due to the non-specificity of GI symptoms, GI allergic reactions may significantly overlap with a number of other GI disorders, making the diagnosis lengthy and confusing (Heine, 2015). Moreover, in this patient cohort, prolonged food exclusions are common and possibly unnecessary. In our retrospective study, we explore the impact of multidisciplinary team (MDT) approach on the food reintroduction rate in a group of children seen in a tertiary GI allergy service.

Methodology
108 patients reviewed (April 2019 – April 2020)

32 patients excluded with only EoE as diagnosis

Final Cohort = 76 patients

Non IgE mediated allergy n = 46
IgE mediated allergy n = 3
Combined Non IgE, IgE and EoE n = 20
Other n = 7

Retrospective review of children seen in a GIFA MDT clinic

Results

Mean Number of excluded foods

<table>
<thead>
<tr>
<th>Percentage of foods reintroduced</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>34</td>
</tr>
<tr>
<td>5 - 25%</td>
<td>8</td>
</tr>
<tr>
<td>26 - 50%</td>
<td>18</td>
</tr>
<tr>
<td>51 - 75%</td>
<td>4</td>
</tr>
<tr>
<td>76 - 100%</td>
<td>12</td>
</tr>
</tbody>
</table>

P = <0.0001

Mean = 5 (Median 4, IQR 2, 6)

Mean = 3 (Median 2.5, IQR 1, 5)

Conclusion
In children with GIFA, long-term unnecessary food exclusions should be avoided, due to the relationship with poor growth, feeding difficulties and nutritional deficiencies (Meyer, 2018) Despite the fact that the majority of them had been following long-term exclusion diets, over half of patients were able to reintroduce at least one food into their diet. In this cohort, the MDT approach, which brings together professionals from different backgrounds to pave the most effective management plan for the patient, has shown to be highly beneficial in supporting patients and their families to reintroduce foods into their diets. This small centre outcome’s demonstrates some positive impacts of MDT approach, which should become the standard model of care in children with complex GIFA.