Management of egg allergy in the Midlands

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Content

- Background
- Audit results
- Discussion in light of LEAP study
Introduction

• Egg and milk allergies- commonest food allergies of infancy

• Prevalence of egg allergy confirmed by challenge 1.6% at 2.5yrs

• Look at current management in the Midlands compared to BSACI 2010 guidelines
Demographics - age at presentation

Number of cases

0-6m | 6m-1y | 1y-2y | 2y-5y | 5y-10y | 10y-15y | >16
Demographics - age of first episode

Number of cases

- Unclear
- 0-6m
- 7m-12m
- 13m-18m
- 19m-2yr
- 2-3y
- 14y
Other food allergies present

- Multiple food allergies: 21%
- Lentils
- Soya
- Fruit/veg
- Seed
- Legumes
- Wheat
- Fish
- Nuts
- Milk
- No
- Not specified: 46%

Number of cases
Other atopic disorders

- Eczema: 77%
- Asthma: 24%

Number of cases
Severity of reaction

- **mild**: 6 cases (7%)
- **severe**: unspecified
- **unspecified**: 71 cases (78%)
Type 1 reaction: Was SPT 1st line? (N=70)

- Yes: 10 centers
- Not available: 2 centers
- No: 2 centers

BSACI STANDARD
SPT recommended as 1st line investigation in type 1 reactions
What size was used as a positive cut off?

- **>3mm**: 8 centers
- **>5mm**: 1 center
- **>7mm**: 1 center

**BSACI STANDARD**
- Cut off of ≥3mm recommended
- Indicates egg allergy likely
- Should be doing this in 95% of cases
- Actual = 81%
BSACI STANDARD
In cases of SPT results <3mm- recommends to rpt and consider Ig E. Oral egg challenge after that should then be considered.
Ig E results

- Unspecified
- Negative
- Grade 5
- 0-10
- 10 to 20
- 20 to 50
- 50 to 100
- >100

Number of cases
Type 2 reactions: Was SPT 1st line? (N=21)

BSACI STANDARD
In type 2 reactions a SPT of >/= 5mm makes egg allergy likely
0-1mm Egg allergy excluded
2-4mm consider oral challenge

Number of cases, N=15
Type 2 reactions: SPT results

Number of cases N=15

- 3-5mm: 2 cases
- 6-10mm: 10 cases
- 11-15mm: 1 case
- Unspecified: 1 case
Management: Advice

- Advice verbally: 100%
- Advice written: 86%

BSACI STANDARD

100%

Patients should be given verbal and written advice about their potential allergy/ not allergic claims.
Management: Dietician referral

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>Yes</th>
<th>na</th>
<th>Declined</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>60%</td>
<td></td>
<td></td>
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</tbody>
</table>

BSACI STANDARD 100%
Referral should be considered in Vegetarian diets or multiple food allergies

60% referred
Management: Medications

- BSACI STANDARD
  - 100% All children should have a personalized allergy plan
- 100% children should be advised to keep emergency antihistamine available

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>personalised plan</td>
<td>84%</td>
</tr>
<tr>
<td>Emergency antihistamine</td>
<td>100%</td>
</tr>
</tbody>
</table>
Management: Medications

- AAI given in 23 of the 91 cases (severe reactions, asthma, nut allergies)
- 1 did not have documented evidence of training given

BSACI STANDARD 100%
Families should receive training about how to use AAI including a demonstration with a demo device
Actual= 96%
BSACI STANDARD 95%
with severe reactions should be given an epipen
Actual= 100%
Follow up (N=25) - Age tolerating Egg

Number of cases N=6

- 10m-18m: 3
- 19m-2y: 1
- 2-3y: 1
- 3-4y: 1
- 6-7yr: 1
Follow up (N=25) - SPT results

<table>
<thead>
<tr>
<th>Number of cases</th>
<th>N= 16</th>
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<tbody>
<tr>
<td>0mm</td>
<td>4</td>
</tr>
<tr>
<td>1-3mm</td>
<td>5</td>
</tr>
<tr>
<td>4-5mm</td>
<td>5</td>
</tr>
<tr>
<td>6-10mm</td>
<td>1</td>
</tr>
<tr>
<td>11-15mm</td>
<td>1</td>
</tr>
<tr>
<td>Unspecified</td>
<td>5</td>
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</tbody>
</table>
SPT to nuts n=31

- 77% of the measurements are 3-5mm.
- All >/3mm told to avoid nuts.
- 10mm told to avoid.

What should we be doing?
LEAP consensus guideline??

- Infants with early onset atopic disease in first 4-6 months may benefit from evaluation by an allergist/physician trained in allergy
- Investigation may involve SPT, in-office observed peanut challenge, or both, as deemed appropriate after discussion with the family
- Observed peanut challenge for those with a positive peanut skin test may be considered
Summary

• There is some variation within the midlands
• Within each center less variation
• SPT and a good clinical history of an IgE mediated reaction (or positive IgE/ challenge in centers where SPT is not possible) is recommended to confirm diagnosis
• SPT cut off of >/ 3mm should be used in cases with a strong history and >/ 5mm in less typical histories
• ? Should we be testing children for nut panel at?
Thank you

Please contact me if you would like a copy of any of the results for your individual centers;

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