Egg Allergy in Children – Primary Care Guidance

Parent presents with concerns about egg allergy

Is this IgE egg allergy? Immediate reaction to egg ingestion (up to 2 hours after ingestion) See Box 1 for symptoms/signs

Is this non-IgE egg allergy? Delayed reaction to egg ingestion (hours to days after ingestion) See Box 2 for symptoms/signs

YES – trial elimination of egg from diet for 2-4 weeks, then reintroduce

NO – consider other diagnoses. Consider referral if ongoing concern/parental anxiety

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**Mild**

- Under 2 years at time of reaction
- Reaction to raw or well cooked egg e.g. scrambled/boiled
- Skin reaction – urticaria, erythema, angioedema
- 1 x vomit or mild abdominal pain
- No other symptoms – check ABC symptoms (see Box 1)
- Not on regular inhaled corticosteroids
- No or mild/moderate eczema

**Moderate**

- 2 years and above at time of reaction
- Reaction to baked egg e.g. cake or scotch pancake
- More than 1 episode of vomiting
- Severe abdominal pain, recurrent vomiting or diarrhoea
- Asthma on regular inhaled corticosteroids
- Severe eczema, no response to moderate topical steroids
- Other suspected food allergies

**Severe**

- Any evidence of severe reaction/anaphylaxis – check ABC symptoms (see Box 1)
- Reaction to raw or well cooked egg e.g. scrambled/boiled
- Skin reaction – urticaria, erythema, angioedema
- More than 1 episode of vomiting
- Asthma on regular inhaled corticosteroids
- Severe eczema, no response to moderate topical steroids
- Other suspected food allergies

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**Home introduction of egg**

- Prescribe chlorphenamine prn (for under 2 years)
- Provide BSACI allergy action plan and discuss this with parents
- Start with baked egg when at least 12 months old and 6 months from last reaction
- If no reaction move onto well cooked egg after 6 months
- Encourage early introduction of peanut
- Provide parent with following leaflets:
  - Egg allergy information leaflet
  - Home introduction of egg leaflet
  - Weaning your food allergic baby leaflet

**Refer to allergy service**

- Prescribe antihistamine (see box 3)
- Advise to avoid all egg if not already eating baked egg
- Provide BSACI allergy action plan and discuss this with parents
- Refer to secondary care service
- Encourage early introduction of peanut unless severe eczema
- Provide parent with following leaflet:
  - Egg allergy information leaflet
  - Weaning your food allergic baby leaflet

**Refer and prescribe adrenaline**

- Advise to avoid all egg
- Refer to secondary care service
- Prescribe adrenaline autoinjectors and antihistamine (see box 3)
- Provide BSACI allergy action plan and discuss this with parents
- Encourage early introduction of peanut unless severe eczema
- Provide parent with following leaflets:
  - Egg allergy information leaflet
  - Weaning your food allergic baby leaflet
Egg Allergy in Children

Egg allergy in children is common – prevalence of approximately 2%
Anaphylaxis is rare
Most children outgrow their egg allergy – 2/3 by 16 years of age
First reactions are often to scrambled or boiled egg at weaning

**Typical symptoms**
- Urticaria, angioedema, erythema within minutes
- GI symptoms – vomiting, abdominal pain, diarrhoea within 2 hours

More severe reactions are much less common but symptoms include:
- **Airway** - hoarse voice/cry, persistent cough, stridor, excessive drooling, swollen tongue
- **Breathing** – wheeze, cyanosis, breathlessness/increased work of breathing
- **Circulation** - pale, floppy, dizzy, unusually and profoundly sleepy, loss of consciousness

If infant/child reacted to well cooked e.g. scrambled or raw egg, but could already tolerate baked egg e.g. cake – encourage ongoing feeding with baked egg 3x per week

Dietician referral generally not required unless excluding dairy or multiple other foods

**Box 1 – IgE Egg Allergy**

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If infant/child reacted to well cooked e.g. scrambled or raw egg, but could already tolerate baked egg e.g. cake – encourage ongoing feeding with baked egg 3x per week

Dietician referral generally not required unless excluding dairy or multiple other foods

**Box 2 – Non-IgE Egg Allergy**

Typically presents 4-36 hours after egg ingestion with flare of eczema or GI symptoms
If suspected trial egg exclusion for 2-4 weeks and then reintroduce looking for resolution and recurrence of symptoms
If diagnosed - gradually reintroduce egg after 6 months starting with baked and moving to well cooked if tolerated. If egg is not tolerated, continue to avoid and try again in another 6 months

Dietician referral generally not required unless excluding dairy or multiple other foods

**Box 3 – Medications**

Prescribe antihistamine - chlorphenamine prn if under 2 years or cetirizine prn if 2 or over
If required prescribe Adrenaline Autoinjector as per cBNF advice – 2 pens should be available at all times.
- 6 months to 6 years 0.15mg
- 7 years to 16 years 0.3mg

Please signpost parents to the appropriate Adrenaline autoinjector websites where they can watch the relevant training video and order practice pens (links)

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**Vaccines**

**MMR**
It is safe for egg allergic children to have the MMR vaccination as per the green book

**Influenza**
Intranasal LAIV is safe in egg allergic children unless they have had anaphylaxis to egg requiring ITU admission. These children require referral to secondary care for vaccination due to lack of safety data.

Most current IM vaccinations contain very low levels of ovalbumin (<0.12mcg/ml) and can be administered safely in primary care. Public Health England publish the ovalbumin content of influenza vaccines for the forthcoming influenza season annually.

**Yellow Fever**
This vaccination contains egg and is contraindicated. For patients where vaccination is absolutely necessary, a referral should be made to a tertiary allergy centre.