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

NO

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

YES

Mild	Moderate	Severe
Under 2 years at time of reaction	2 years and above at time of reaction	Any evidence of severe reaction/anaphylaxis – check ABC symptoms (see Box 1)
Reaction to raw or well cooked egg e.g. scrambled/boiled	Reaction to baked egg e.g. cake or scotch pancake	
Skin reaction – urticaria, erythema, angioedema	More than 1 episode of vomiting	
1 x vomit or mild abdominal pain	Severe abdominal pain, recurrent vomiting or diarrhoea	
No other symptoms – check ABC symptoms (see Box 1)	Asthma on regular inhaled corticosteroids	
Not on regular inhaled corticosteroids	Severe eczema, no response to moderate topical steroids	
No or mild/moderate eczema	Other suspected food allergies	

Home introduction of egg

Prescribe chlorphenamine prn (for under 2 years)
Provide BSACI allergy action plan and discuss this with parents (link)
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 (link)
- Home introduction of egg leaflet (link)
- Weaning your food allergic baby (link)

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 (link)
Refer to secondary care service
Encourage early introduction of peanut unless severe eczema
Provide parent with following leaflet:
- Egg allergy information leaflet (link)
- Weaning your food allergic baby leaflet (link)

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 (link)
Encourage early introduction of peanut unless severe eczema
Provide parent with following leaflets:
- Egg allergy information leaflet (link)
- Weaning your food allergic baby leaflet (link)

Egg Allergy in Children – Primary Care Guideline

Box 1 – IgE Egg Allergy

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

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.

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)

BSACI egg allergy guideline 2021
Allergy health professionals
BNF, MHRA
BSACI AAP
BSACI early feeding guidance
BSACI adrenaline autoinjector guidance