

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Food Allergies in Children

Type and Clinical Presentation

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Epidemiology

The prevalence of food allergy has been reported to range from **6% to 8%** in children up to the age of 3 years.

Only 25–40% of self-reported food allergy is confirmed as true clinical food allergy by an oral food challenge

Food intolerance and allergy

Food intolerance is the general term used to describe a range of adverse responses to food including allergic reactions (e.g. peanut allergy, coeliac disease), adverse reactions (e.g. those resulting from enzyme deficiencies such as lactose intolerance).

Food allergy can be described as an inappropriate reaction by the body's immune system to the ingestion of a food.

Any food has the potential to cause an adverse reaction. Foods that commonly induce adverse reactions include milk, gluten containing cereals, nuts, peanuts, eggs and shellfish.



Know the Eight Food Groups which Cause Most Serious Food Allergy Reactions

Most food allergies are caused by these eight food groups.
Any food can cause an allergic reaction, however.



MILK



EGGS



FISH



SHELLFISH



WHEAT



SOY



PEANUTS



TREE NUTS

Definitions

- Anaphylaxis
- Food allergy
- IgE -mediated reaction
- Non-IgE-mediated reaction
- Systemic allergic reaction.





Recognize food allergy symptoms!



- Food allergy symptoms can include
 - ◆ Swollen lips, tongue, or eyes.
 - ◆ Itchiness, rash, or hives.
 - ◆ Nausea, vomiting, or diarrhea.
 - ◆ Congestion, hoarse voice, or trouble swallowing.
 - ◆ Wheezing or difficulty breathing.
 - ◆ Dizziness, fainting, or loss of consciousness.
 - ◆ Mood change or confusion.

Background

Food allergy may be confused with food intolerance

- Food allergy can be classified into IgE-mediated and non-IgE-mediated reactions.

- IgE-mediated reactions are acute and frequently have a rapid onset.
- Non-IgE-mediated food allergy is frequently delayed in onset.

Focused history

A personal or family history of atopy is the most significant predictor of allergy.

Ask about history of the reaction

- Timing
- likely precipitants.

Include history of eczema, asthma, Gastroesophageal reflux

Note that the absence of signs or symptoms does not exclude a food allergy

Immediate reactions -IgE mediated

Occur **within 2 hours** of contact or ingestion

Symptoms are **consistent and reproducible** and include rashes, itching, wheeze, GI symptoms, angioedema and anaphylaxis

Skin prick tests (or blood tests for specific IgE antibodies to allergens) can help diagnosis

Treatment in IgE Mediated

Exclusion

Should have dietician advice

Should have an EpiPen if history of anaphylaxis or have food allergy and asthma

Delayed reactions – Non IgE mediated

Occur > 2hrs after ingestion but **within 2--3 days**

Often difficult to reproduce and symptoms less specific

May present:

- eczema, colic, reflux, loose stools, constipation, food aversion

No tests help diagnosis

Delayed reactions – Non IgE mediated

Common symptoms include abdominal discomfort, vomiting and diarrhoea. In some cases constipation or colic can be the presenting symptoms.

The symptoms often take longer to develop (hours-days) rather than those of IgE mediated food allergies which frequently occur within 5 -30 minutes following food ingestion.

Delayed reactions – Non IgE mediated

Some symptoms of a non IgE-mediated food allergy may be what you would expect to see in an allergic reaction, such as: redness and itchiness of the skin – although not a raised, itchy red rash (hives) the skin becomes itchy, red, dry and cracked (atopic eczema)

Diagnosing non-IgE-mediated food allergy

This is known as an elimination diet. It may involve avoiding just one food, or several foods.

If child's symptoms improve or disappear when a food is avoided, but then return when that food is eaten again, it can confirm the allergy.

Assessment and allergy-focused clinical history (1)

The Skin

IgE- mediated	Non-IgE-mediated
Pruritus	Pruritus
Erythema	Erythema
Acute urticaria – localised or generalised	Atopic eczema
Acute angioedema – most commonly of the lips, face and around the eyes	

Assessment and allergy-focused clinical history (2)

The gastrointestinal system

IgE- mediated	Non-IgE-mediated
Angioedema of the lips, tongue and palate	Gastro-oesophageal reflux disease
Oral pruritus	Loose or frequent stools
Nausea	Blood and/or mucus in stools
Colicky abdominal pain	Abdominal pain
Vomiting	Infantile colic
Diarrhoea	Food refusal or aversion
	Constipation
	Perianal redness
	Pallor and tiredness
	Faltering growth in conjunction with at least one or more gastrointestinal symptoms above (with or without significant atopic eczema)

Assessment and allergy-focused clinical history (3)

The respiratory system

(usually in combination with one or more of the previous symptoms and signs)

IgE- mediated	Non-IgE-mediated
Upper respiratory tract symptoms (nasal itching, sneezing, rhinorrhoea or congestion [with or without conjunctivitis])	
Lower respiratory tract symptoms (cough, chest tightness, wheezing or shortness of breath)	

In addition, take note of any other signs and symptoms of systemic allergic reaction or anaphylaxis.

Diagnosis of IgE-mediated food allergy (1)

- If IgE-mediated food allergy is suspected, offer a skin prick test and/or blood tests
- Skin prick tests should only be undertaken where there are facilities to deal with an anaphylactic reaction.



Diagnosis of non IgE-mediated food allergy

If non-IgE-mediated food allergy is suspected:

- trial elimination of the suspected allergen and reintroduce after the trial
- seek advice from a registered dietitian with appropriate competencies.

Diagnosis of non IgE-mediated food allergy

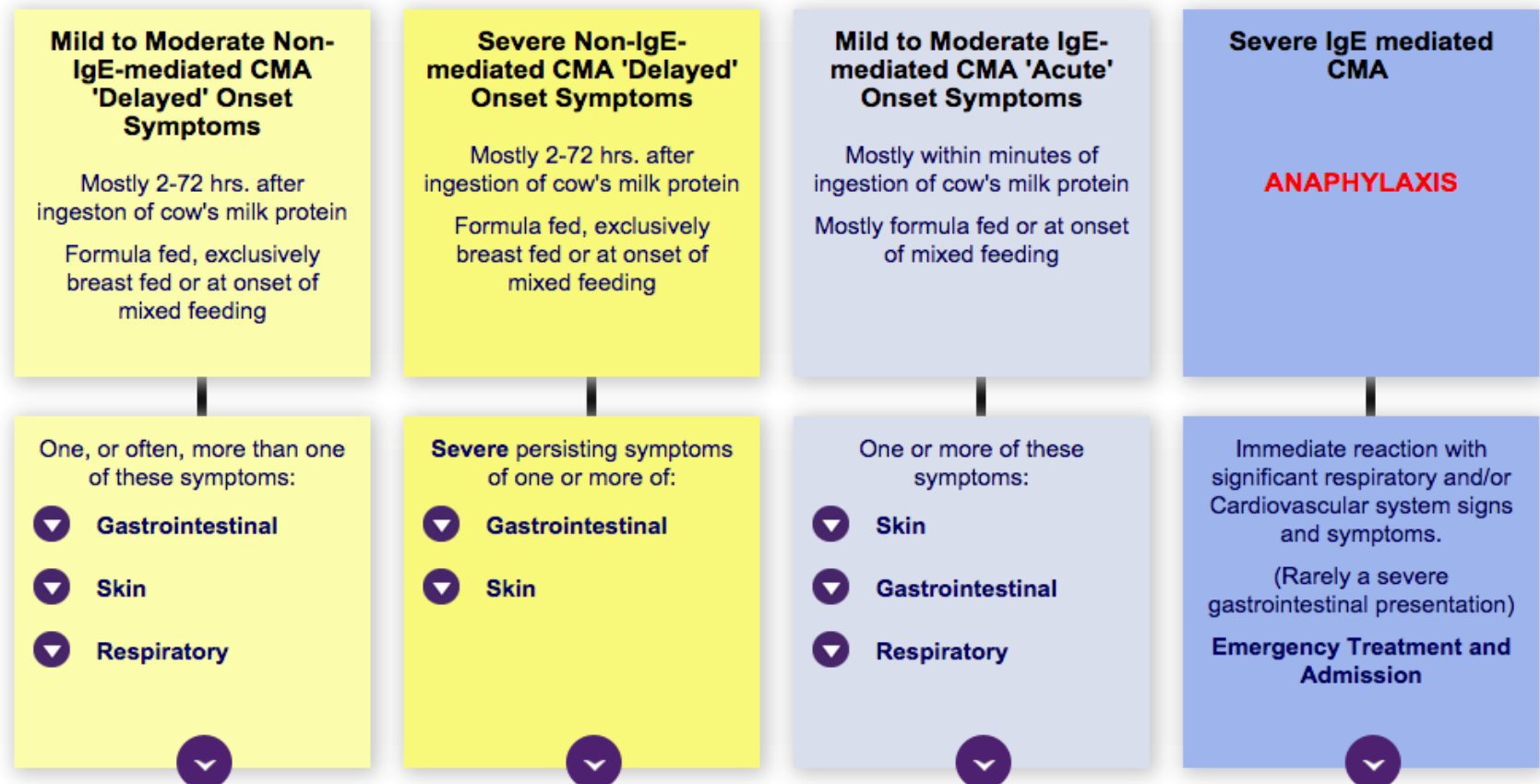
Treatment is 2--6 week trial of exclusion of the suspected food followed by reintroduction

If cows milk protein allergy suspected – see GOR guideline

Cows milk allergy diagnosis

Suspected Cow's Milk Allergy (CMA) in the 1st Year of Life - having taken an Allergy-focused Clinical History

TB/AF/NS/CV/JW | Oct 2013



Patients at risk

has had an anaphylactic reaction

had one or more severe delayed reactions

has immediate or delayed allergic reactions to multiple allergens or food groups, especially if there is faltering growth

has had acute allergic reaction with coexisting asthma

moderate – severe eczema where cross reactive or multiple food allergies suspected

has not responded to a single –allergen elimination diet

Or:

There is strong clinical suspicion of Ig E--mediated food allergy but allergy test results are negative

Top Tips

All children who are excluding multiple foods should be referred to a paediatric dietitian

Most cases of urticaria lasting over several days are associated with a viral infection and do not represent a food allergy

Do not use serum--specific IgE testing to diagnose delayed food allergy

Recommendations

The recommendations cover the following areas:

- Assessment and allergy-focused clinical history
- Diagnosis of IgE-mediated food allergy
- Diagnosis of non-IgE-mediated food allergy
- Providing information and support
- Food allergy management
- Alternative diagnostic tools

Questions ?

