



NHSGGC GUIDELINE FOR THE MANAGEMENT OF COW'S MILK ALLERGY IN INFANTS

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NHSGGC Guideline for the Diagnosis and Management of Cow's Milk Protein Allergy in Infants

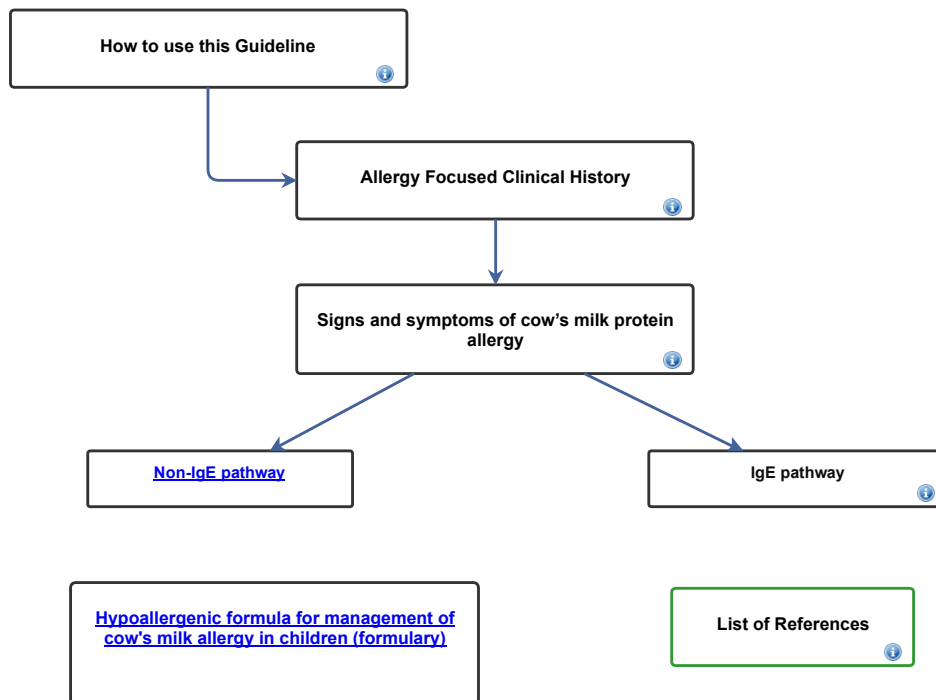
A guideline is intended to assist healthcare professionals in the choice of disease specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate to others involved in the care of the patient.

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Key More Information Black Flag Blue Flag Green Flag Default

GENERAL RELATED INFORMATION FOR PATHWAY

No related information.

SPECIFIC RELATED INFORMATION FOR PATHWAY SECTIONS



NO RELATED INFORMATION

HOW TO USE THIS GUIDELINE

Information

This guideline is intended for use by all health professionals in the acute and primary care settings for the diagnosis and management of infants and young children (up to two years) with symptoms of suspected cow's milk protein allergy (CMPA).

The following steps should be followed

- Undertake an allergy focused clinical history • Refer to the signs and symptoms guide to determine the diagnosis
- Follow the appropriate pathway for IgE and non IgE mediated CMPA
- Refer to the NHSGGC Formulary Hypoallergenic formula for the management of cow's milk allergy in Children, for guidance on the appropriate formula

ALLERGY FOCUSED CLINICAL HISTORY

Information

If cows' milk protein allergy is suspected, take an allergy-focused clinical history tailored to the presenting symptoms and the age of the infant.

Allergy-focused clinical history (Start from birth) ^{1,2}
<p>History of reaction</p> <p>Age of first onset: (soon after birth, first introduction of formula to breast fed baby or around starting complementary feeding)</p> <p>Type of feeding: (breast, formula fed or mixed fed infant)</p> <p>Breastfed infants:</p> <ul style="list-style-type: none"> • Has the infant had any previous exposure to formula milk? e.g. given a formula top up at the time of birth

- Does the mother consume dairy products? Is it a milk free diet?
- Details of any changes in maternal diet and apparent response to such changes, e.g. any response to the symptoms on elimination of milk and milk containing products and/or soya
- Details of any feeding difficulties, e.g. positioning and attachment issues, aversion

The likelihood of symptoms being related to milk is much lower in exclusively breast fed infants than in formula fed infants.^{3,4,5}

Formula fed infants

- Age formula introduced
- Any changes to formula e.g. extensively hydrolysed formula (eHF)
- Any feeding difficulties e.g. food aversion, refusal of feeds
- Volume of milk offered (should not exceed 180ml/kg)

Mixed fed infants (Breast & Formula)

- Age formula introduced
- Any changes to formula e.g. eHF
- Any feeding difficulties, e.g. food aversion, refusal of feeds
- Did the symptoms only present when cow's milk based formula was given to a breast fed infant
- Volume of milk offered (should not exceed 180ml/kg)

Weaning Period

Age when weaning foods introduced and types of foods

If symptoms presented when milk products were introduced into the weaning diet but no reaction to formula then it is unlikely to be CMPA

Time to reaction

Immediate: usually within minutes

Delayed: usually after ≥ 2 hours to days

What were the symptoms/signs, the sequence and the severity;

respiratory symptoms (e.g. wheeze/breathing difficulties), signs of hypotension (e.g. lethargy, floppy), gastrointestinal symptoms (e.g. vomiting, loose stools, bowel motions alternating between diarrhoea and constipation, skin symptoms (urticaria, eczema)

How long to resolve?

e.g. minutes-hours or days

Treatment received and response?

e.g. antihistamines, anti reflux treatment, laxatives, hypoallergenic formula milk

Details of any changes in diet and apparent response to such changes.

e.g. changes in formula milk; anti-reflux, partially hydrolysed, extensively hydrolysed, amino acid or soya infant milk.

Reproducibility of symptoms/signs on repeat exposure
<p>Growth history</p> <p>Weight (centiles)</p> <p>Height (centiles)</p> <p>Head circumference (centiles)</p> <ul style="list-style-type: none"> • follow the centiles, or • is the weight static, or <p>Does the infant's weight: is there a significant drop on the centiles (2 or more)?</p>
<p>History of eczema (atopic dermatitis)</p> <p><u>Signs of eczema:</u> (e.g. eczematous patches; dry inflamed/infected skin)</p> <p><u>Affected areas</u> (e.g. Facial, flexural or trunk)</p> <p><u>Severity and response to treatment</u> (first line treatment; mild to moderate potency topical steroids and moisturizers)</p>
<p>Family history of atopy</p> <p>History of atopic diseases (e.g. asthma, allergic rhinitis, food allergy or eczema) or food allergy in parents or siblings.</p>
<p>If allergy to CMPA is suspected please follow the algorithm for non-IgE or IgE (under development) mediated cows milk protein allergy</p>

SIGNS AND SYMPTOMS OF COW'S MILK PROTEIN ALLERGY

Information

The table below depicts the list of possible signs and symptoms of CMPA and should be used in conjunction with the allergy focused history. The non-IgE signs and symptoms are common in infants and can be related to causes other than CMPA³. This guideline must be used in conjunction with the allergy focused history.

A small number of infants can present with features of both IgE and non-IgE mediated symptoms.

Non-IgE mediated	IgE mediated
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<p>Delayed onset symptoms (within 48hrs - 72hrs post ingestion)</p>	<p>Mostly immediate onset of symptoms (within minutes or up to 2hrs post ingestion)</p>
<p>The clinical features of non-IgE CMPA are variable in type and severity so the diagnosis can be challenging.</p> <p>NICE CDG/ESPGHAN recommend that a differential diagnosis should be considered based on the findings of a thorough allergy focused history.</p> <p>Many of the symptoms associated with CMPA can occur as a result of other common conditions, or as variants of normal, so it is important to consider CMPA as only one in a range of possible diagnoses.</p>	<p>There is a wide range in the severity of symptoms from skin symptoms only to life threatening reactions anaphylaxis.</p>
<p>Skin</p> <ul style="list-style-type: none"> • Pruritis (itch) • Erythema • Atopic eczema <p>Gastrointestinal Tract</p> <ul style="list-style-type: none"> • Repeated episodes of gastro-oesophageal reflux persistent or not responding adequately to 1st line treatment • Vomiting • Constipation, or soft stools with excessive straining • Diarrhoea • Mucus and/or blood in stools (in otherwise well baby) • Abdominal pain (discomfort, painful flatus) • Infantile colic (irritability); prolonged & persistent (>3hrs/day, >3 times/week, >3 weeks) • Feed refusal/aversion • Faltering growth and one or more of the above gastrointestinal symptoms <p>Consider cows milk protein allergy only if symptoms not responding to 1st line treatment.</p> <p>See NHSGGC Guideline on the Management of Eczema in Children for more info</p>	<p>Skin</p> <ul style="list-style-type: none"> • Pruritis (itch) • Acute angioedema (lips, face, around the eyes) • Erythema • Acute urticaria (localised or general) <p>Gastrointestinal Tract</p> <ul style="list-style-type: none"> • Acute angioedema (lips, tongue) • Repeat episodes of acute onset vomiting • Acute onset diarrhoea • Abdominal pain (discomfort, painful flatus) <p>Acute onset Respiratory Symptoms</p> <ul style="list-style-type: none"> • Red/itchy eyes • Blocked/runny nose, sneezing • Cough • Wheeze • Breathlessness <p>Severe IgE mediated reactions - anaphylaxis</p> <p>Immediate reaction with severe respiratory and/or cardiovascular signs and symptoms, needing IM adrenaline</p>

NON-IGE PATHWAY

NO RELATED INFORMATION

IGE PATHWAY

Information

The pathway for IgE patients is under review.

If a child is felt to have an IgE-mediated allergy please refer to the Allergy service through SCI-Gateway

HYPALLERGENIC FORMULA FOR MANAGEMENT OF COW'S MILK ALLERGY IN CHILDREN

(FORMULARY)**NO RELATED INFORMATION****LIST OF REFERENCES****Information**

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