

Having taken an Allergy-focused Clinical History and Physically Examined

Less than 2% of UK infants have CMA. There is a risk of overdiagnosis of CMA if mild, transient or isolated symptoms are over-interpreted or if milk exclusion diets are not followed up by diagnostic milk reintroduction. Such situations must be avoided. There should be increased suspicion of CMA in infants with multiple, persistent, severe or treatment-resistant symptoms. iMAP primarily guides on early recognition of CMA, emphasizing the need for confirmation of the diagnosis, either by allergy testing (IgE) or exclusion then reintroduction of dietary cow's milk (non IgE). Breast milk is the ideal nutrition for infants with CMA and any decision to initiate a diagnostic elimination diet trial must include measures to ensure that breastfeeding is actively supported. Refer to accompanying leaflet for details of supporting ongoing breastfeeding in milk allergic infant. Firststepsnutrition.org is a useful information source on formula composition.

Mild to Moderate Non-IgE-mediated CMA

Mostly 2-72 hrs. after ingestion of
Cow's Milk Protein (CMP)

Usually formula fed, at onset of formula feeding.
Rarely in exclusively breast fed infants

Usually several of these symptoms will be present. Symptoms persisting despite first line measures are more likely to be allergy related e.g. to atopic dermatitis or reflux. Visit gpifn.org.uk for advice about other infant feeding issues.

Gastrointestinal

Persistent Irritability - 'Colic'
Vomiting - 'Reflux' - GORD
Food refusal or aversion
Diarrhoea-like stools – abnormally loose +/- more frequent
Constipation – especially soft stools, with excess straining
Abdominal discomfort, painful flatus
Blood and/or mucus in stools in otherwise well infant

Skin

Pruritus (itching), Erythema (flushing)
Non-specific rashes
Moderate persistent atopic dermatitis

The symptoms above are very common in otherwise well infants or those with other diagnoses, so clinical judgement is required. Trial exclusion diets must only be considered if history & examination strongly suggests CMA, especially in exclusively breastfed infants, where measures to support continued breastfeeding must be taken.

Cow's Milk Free Diet

Exclusively breast feeding mother*

Trial exclusion of all Cow's Milk Protein from her own diet and to take daily Calcium and Vit D

Formula fed or 'Mixed Feeding'*

If mother unable to revert to fully breastfeeding, trial of Extensively Hydrolysed Formula - eHF

See Management Algorithm

Severe Non-IgE-mediated CMA

Mostly 2-72 hrs. after ingestion of
Cow's Milk Protein (CMP)

Usually formula fed, at onset of mixed feeding.
Rarely in exclusively breast fed infants

One but usually more of these **severe, persisting & treatment resistant** symptoms:

Gastrointestinal

Diarrhoea, vomiting, abdominal pain, food refusal or food aversion, significant blood and/or mucus in stools, irregular or uncomfortable stools
+/- Faltering growth

Skin

Severe atopic dermatitis +/- Faltering Growth

Cow's Milk Free Diet Exclusively breast feeding mother*

If symptomatic, trial exclusion of all Cow's Milk Protein from her own diet and to take daily Calcium & Vit D

Formula fed or 'Mixed Feeding'*

If mother unable to revert to fully breastfeeding, trial of replacement of Cow's Milk formula with Amino Acid Formula (AAF). If infant asymptomatic on breast feeding alone, do not exclude cow's milk from maternal diet.

Ensure:

Urgent referral to local paediatric allergy service
Urgent dietetic referral

Severe IgE CMA

ANAPHYLAXIS

Immediate reaction with severe respiratory and/or CVS signs and symptoms.
(Rarely a severe gastrointestinal presentation)

Emergency Treatment and Admission

Mild to Moderate IgE-mediated CMA

Mostly within minutes (may be up to 2 hours) after ingestion of Cow's Milk Protein (CMP)
Mostly occurs in formula fed or at onset of mixed feeding

One or more of these symptoms:

Skin – one or more usually present

Acute pruritus, erythema, urticaria, angioedema
Acute 'flaring' of persisting atopic dermatitis

Gastrointestinal

Vomiting, diarrhoea, abdominal pain/colic

Respiratory – rarely in isolation of other symptoms

Acute rhinitis and/or conjunctivitis



Cow's Milk Free Diet

Support continued breast feeding where possible.
If infant symptomatic on breast feeding alone, trial exclusion of all Cow's Milk Protein from maternal diet with daily maternal Calcium & Vit D as per local guidance.
If infant asymptomatic on breast feeding alone, do not exclude cow's milk from maternal diet.

Formula fed or 'Mixed Feeding'*

If mother unable to revert to fully breast feeding
1st Choice - Trial of Extensively Hydrolysed Formula – eHF
Infant soy formula may be used over 6 months of age if not sensitised on IgE testing

If diagnosis confirmed (by IgE testing or a Supervised Challenge in a minority of cases) :

Follow-up with serial IgE testing and later Planned Challenge to test for acquired tolerance

Dietetic referral required

UK NICE Guidance - If competencies to arrange and interpret testing are not in place - early referral to local paediatric allergy service advised

* **Actively support continued breastfeeding (see over)**