**CHILDREN’S SERVICES**

**Dietary approach to diagnosis and initial management of cow’s milk allergy (CMA) in infants**

Clinical picture consistent with allergy to cow’s milk protein (CMP)

- Presenting with gastrointestinal symptoms
  - CMA highly likely
  - CMA is likely
  - CMA is one possibility

- Presenting with acute allergic reactions / flare ups of atopic condition (e.g. eczema)
  - Severe
  - Not severe

**Steps for CMA:**
- Trial of CMP avoidance
- Refer to Dietitian for weaning advice
- Use EHF* as alternative
- Trial of strict avoidance of CMP in all forms
- Use Amino Acid formula* as alternative
- Referral to Allergy Clinic
- Diagnostic work up
- Trial of avoidance & use of Amino Acid formula* as appropriate

**Steps for Not Severe:**
- Evaluation with allergy testing / challenge as & when appropriate
- Strict avoidance of CMP in all forms
- Use Amino Acid formula* as an alternative
- Referral to Allergy Clinic
- Evaluation with allergy testing

**Steps for Severe:**
- Trial of CMP avoidance
- Use EHF* as an alternative
- Refer for Dietitian for weaning advice
- Evaluation with allergy testing / challenge as & when appropriate

**Symptoms not fully resolved:**
- Trial of CMP avoidance
- Use EHF* as alternative
- Refer for Dietitian for weaning advice
- Evaluation with allergy testing / challenge as & when appropriate

**Still reacting to EHF*:**
- Evaluation with allergy testing / challenge as & when appropriate

**Other causes for presenting symptoms:**
- Improbable
- May need to be excluded

**No response:**
- Diagnostic work up
- Trial of avoidance & use of Amino Acid formula* as appropriate
Notes:

1. Cow’s Milk Allergy (CMA) can result in a wide range of gastro-intestinal symptoms including vomiting, haematemesis, colic, failure to thrive, abdominal distension, diarrhoea and haematochezia (blood in the stools). Gastro-oesophageal reflux and constipation can also be associated with underlying CMA in a significant proportion of infants. A range of serious conditions can also result in similar symptoms. These include gastro-intestinal infections, urine infection, coeliac disease & malabsorptive states, cystic fibrosis, metabolic disorders, neurological disorders, inflammatory bowel disease, intussusception, and mal-rotation with persisting or intermittent volvulus. Thus making the correct diagnosis in this form of CMA may be the most important challenge in management and certain conditions may need to be excluded as early as possible. In CMA presenting with gastro-intestinal symptoms, “allergy tests” based on detection of IgEs may or may not be positive. Thus the diagnosis frequently rests on the clinical picture and response to avoidance measures. The extent of the diagnostic work up to exclude other possible conditions before the diagnosis of CMA is established will vary according to the nature of the presenting symptoms and the clarity of the link with the exposure to cow’s milk protein. Generally the following features should serve as “red flags”: Fever, tender or tense abdomen, circulatory changes, associated pallor, high inflammatory markers. Baby with recurrent vomiting, distress or diarrhoea associated with one of these features should be referred to hospital without delay.

2. In this type of presentation the diagnosis is usually not difficult to establish. There is a short interval between exposure and developing the reactions and the symptoms are of more acute nature. In infancy frequently the limited number of items included in the diet makes the diagnosis easier to establish. Allergy testing tends to be more helpful in this type of presentation.

3. The extent and acuteness of eczema flare ups linked to exposure to CMP vary; in some cases only repetitive intake results in gradual worsening of the eczema. In others, more acute type flare ups can happen after single exposure. “Allergy tests” based on detection of IgEs may or may not be helpful.

4. In cases where a highly modified form of cow’s milk protein is the suspected trigger (e.g. via maternal breast milk or in a highly cooked form such as in cakes and biscuits), it is more appropriate to use Neocate as an alternative formula feed.

5. In breast fed infants breast feeds can continue but CMP avoidance in maternal diet may be needed.

6. In breast fed infants breast feeds can continue but CMP avoidance in maternal diet will be necessary during the assessment phase.

7. Other dietary restrictions may need to be implemented on the baby’s and (if breast fed) mother’s diet. In some cases breast feeding may need to be interrupted temporarily or permanently.

8. Consultation with Paediatric Gastro-enterologist or Paediatric Surgeons may be needed.


10. *: Neocate is the most widely used amino-acid formula in the UK, also available is Nutramigen AA.

11. Paediatric Dieticians at St. Peters Hospital.
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