The prevalence of lactose intolerance in children with non-IgE-mediated gastrointestinal cows’ milk protein allergy (CMA)

Written as an E letter to the article: Differentiating milk allergy (IgE and non-IgE mediated) from lactose intolerance: understanding the underlying mechanisms and presentations.

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Discussion

Although numbers were small, this study suggests that lactose intolerance is not common in non-IgE-mediated CMA. It highlights that hypoallergenic formulas containing lactose, in the absence of breast milk, should be considered, especially as lactose has benefits including:

- Increased palatability in hypoallergenic formulas
- Increased mineral absorption of calcium and other minerals
- Development and maintenance of a healthy gut mucosa and microbiome
- Indirectly enhances the immune system

Study Rationale

- Use of lactose containing formulas in non-IgE-mediated CMA remains highly debated because of concerns related to brush border damage in children with cows’ milk associated enteropathy
- ESPGHAN guidelines have suggested that a hypoallergenic formula without lactose might be useful until normal absorptive function of the mucosa was regained
- The prevalence of concomitant lactose intolerance in non-IgE mediated CMA has never been studied

Study Design

- Multicentre prospective observational study

Subjects

- Children <2 years of age (average age was 4.5 months)
- With gastrointestinal symptoms of suspected non-IgE-mediated CMA
- Not on a hypoallergenic formula at the time of diagnosis

Method

- Lactose loading dose (1g/kg) administered prior to commencing cows’ milk protein elimination diet
- Collected the first stool produced (frozen at -18°C)
- Stool chromatography performed at Great Ormond Street Hospital
- Symptom questionnaire before and after 4 weeks of cows’ milk elimination diet

Results

- 20 children were recruited and 8 stool samples were obtained within protocol specifications
- Lactose was not detected in any stool sample of children in this study
### References