

Linear growth in Children with COW Milk allergy and their response to hypoallergenic diet; Significant Catch-up in the first 6 months.

S Elsidig, M Shaat, M Itani, C Jour, F Souieky, N Al-Naimi, M Ehlal, A Soliman
Hamad General Hospital, Doha, Qatar
Pediatric Department, Dietetic and Nutrition Department

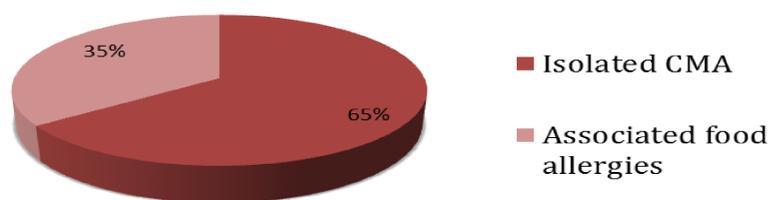
Introduction

Milk allergy is an adverse immune reaction to proteins in cow's milk. Treatment consists of eliminating milk from the diet. Controversy exists about the effect of CMA and the use of hypoallergenic formula on linear growth in these children..

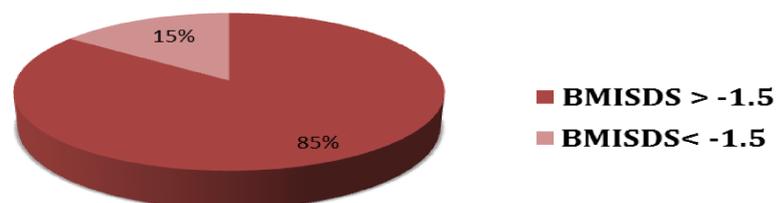
OBJECTIVES:

Evaluate the growth status of children with CMA at their first presentation and after 6 months of hypoallergenic formula.

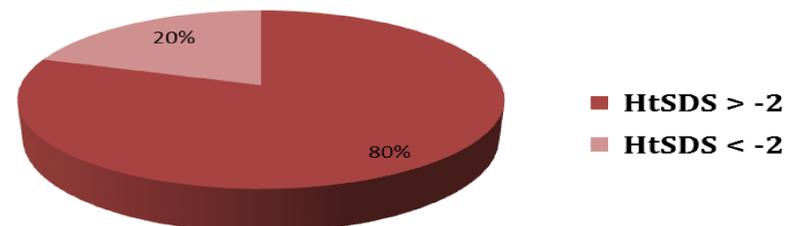
Presence of other food allergies



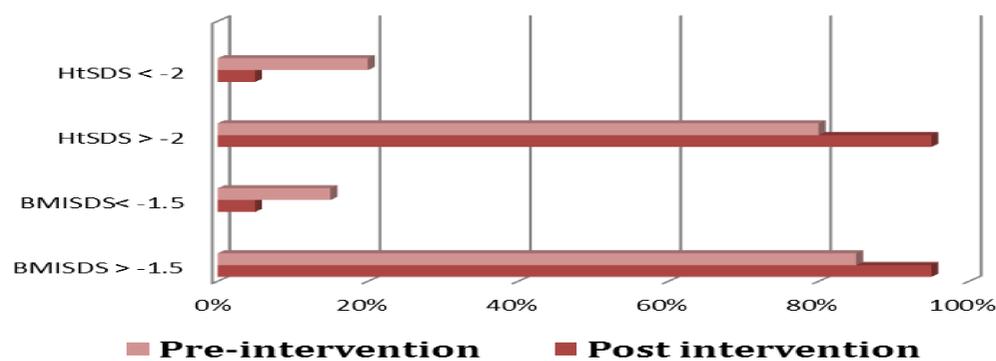
BMISDS at Presentation



HtSDS at Presentation



Anthropometry pre & post hypo-allergic formula



Results

• A total of 20 children aged between 2 months to 5.9 year. (mean age = 1.34 +/- 1.9 years).

• Presentation anthropometric data:

○ BMISDS = -0.12 +/- 1.3 (only 3 had low BMISDS < -1.5).

○ Ht SDS = -0.68 +/- 1.057, with 4/20 children with HTSDS < -2.

• Anthropometry 6 months post hypo-allergic formulae:

○ BMISDS = -0.196 +/- 1.1 and only 1/20 children had BMISDS < -1.5.

This child has a significant catch up in HSDS from -1.6 to -1.1 which explained the same BMISDS despite gaining weight properly

○ HtSDS = -0.497 +/- 0.97 only 1/20 had HtSDS < -2

This child had significant multiple food allergies. with low weight gain (4.4 g/day during the treatment period)

Methodology

- Observational, longitudinal, retrospective study
- Infants and children diagnosed with CMA, had high IgE level at diagnosis between 6-2016 and 12-2017.
- The following data were analyzed:
 - Chronology and type of feeding
 - Presence of other food allergy, atopic dermatitis or other symptoms of allergy,
 - Duration of CMA
 - Anthropometric data at diagnosis & after 6 months from hypoallergenic formula, expressed as Z-scores.

Conclusion

- Our study showed that 20% of children with CMA had short stature and 15% had low weight for height at presentation.
- Improvement of linear growth and weight gain was observed in these patients when put on hypo-allergenic formula.
- Children with normal anthropometric data at presentation, continued to grow normally on a hypoallergenic diet.
- The presence of other food allergies might affect weight gain and linear growth in some children



Ashraf Soliman MD PhD FRCP Department of Pediatrics
Hamad General Hospital Doha, Qatar,
Atsoliman@yahoo.com



مؤسسة حمد الطبية
Hamad Medical Corporation
HEALTH · EDUCATION · RESEARCH
صحة · تعليم · بحوث

