Clinical Outcome of Infants and Children Diagnosed with Cow Milk Allergy 3years after Reintroduction of Cow Milk Products

Thesis

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LIST OF ABBREVIATIONS

Abbrev.	Full term
AAF	Amino Acid based Formula
AD	Atopic dermatitis
ADHD	Attention deficit hyperactivity disorder
APC	Antigen presenting cell
APT	Atopic patch test
ASD	Autism spectrum disorder
BPR	Bleeding per rectum
CD	Celiac disease
CMA	Cow's milk allergy
CMI	Cow's milk intolerance
CMPA	Cow milk protein allergy
CMPs	Cow milk proteins
CMPSE	Cow's milk protein sensitive enteropathy
DBPCFC	Double blind placebo controlled food challenge
DES	Diffuse esophageal spasm
DHA	Docosahexaenoic acid
EE	Eosinophilic esophagitis
EGD	Esophagogastroduodenoscopy
eHF	Extensive hydrolysated formula
ELIZA	Enzyme linked immunoabsorbent assays

ENS	Enteric Nervous System
FA	Food allergy
GER	Gastroesophageal reflux
GERD	Gastroesophageal reflux disease
GM	Goat milk
H_2 RA	Histamine receptor antagonist
HF	Hydrolyzed formula
HRPF	The hydrolysed rice protein formulas
IBD	Inflammatory bowel disease
IBS	Irritable bowel syndrome
LES	Lower esophageal sphincter
LGG	Lactobacillus GG
OCT	Open Challenge Test
pHF	Partially hydrolyzed formulas
RAST	Radio-allergosorbent test
RE	Reflux esophagitis
SBBF	Soy bean based formula
SF	Soy formula
SOTI	Specific oral tolerance induction
SPTs	Skin prick tests
UGI	Upper gastrointestinal imaging series
WFA	Weight For Age

INTRODUCTION

Cow's milk protein allergy affects from 2 to 6% of children, with the highest prevalence during the first year of age ***(Caffarelli et al., 2010)*.**

Patients with cow's milk protein allergy present with a wide range of IgE- and non-IgE-mediated clinical syndromes IgE-mediated reactions occur immediately or within 1–2 hours of ingestion, whereas non-IgE-mediated reactions generally have a delayed onset beyond two hours of ingestion. Clinical symptoms of cow's milk protein allergy commonly appear during the first months of life, usually within days or weeks after feeding with CM-based formulas have been started, or may sometimes be seen in exclusively breastfed infants ***(Jacob et al., 2011)*.**

Infants with cow's milk protein allergy usually present with symptoms similar to allergic reactions in older individuals. These include cutaneous symptoms such as urticaria, rash, and pruritus, as well as respiratory symptoms such as wheeze and cough; these symptoms are usually indicative of IgE-mediated cow's milk protein allergy. Cow's milk protein allergy can also present with gastrointestinal and nutritional manifestations. These include gastro esophageal reflux, esophagitis, gastritis, delayed gastric emptying, enteropathy, colitis, constipation, and failure to thrive ***(Brill, 2008)*.**

For cow's milk protein allergy sufferers, avoidance of dietary milk proteins remains the only effective management strategy ***(Ross, 2005)*.**

Children with cow's milk protein allergy should be monitored for development of tolerance, since most will outgrow their allergy in childhood. Non-IgE mediated cow's milk protein allergy has a better prognosis and tends to resolve more quickly than IgE-mediated CMA (cow milk allergy) ***(Jacob et al., 2011)*.**

About 50% of children have been shown to resolve cow's milk protein allergy within the first year of age, 80-90% within their fifth year ***(Caffarelli et al., 2010)*.**

HYPOTHESIS & AIM OF THE WORK

The aim of the present study was to find out the clinical outcome of patients diagnosed with cow milk allergy who underwent elimination of cow milk products 3 years after reintroduction of dairy products.