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Can a Baby Be Allergic to Breastmilk: Sensitivities, Allergies, Galactosemia, and Lactose Intolerance Handout

Top Takeaways

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Lactation professionals often hear from their clients that their breastfed babies have been diagnosed as lactose intolerance. This lack of understanding regarding types of lactose intolerance and potential issues with breastfeeding involving the newborn gut often lead to a cessation of breastfeeding. This session will cover the three main types of lactose intolerance as well as galactosemia. Maternal gut damage and protein sensitivity and how that can impact the breastfed baby will also be addressed. Attendees will also learn about the most common foods that cause food sensitivity and allergy and what referrals are best made with these issues.

Objectives

- Identify three main types of lactose intolerance.
- List two reasons lactose intolerance as a diagnosis in a healthy, term newborn is unlikely.
- Define galactosemia.
- List four most common foods that can cause food sensitivity/allergy for the breastfeeding newborn.

Lactose is broken down by lactase into glucose, which is broken down by galactase into energy and GMOs.

When lactose does not get broken down in the small intestine it moves in to the large intestine where bacterial fermentation happens. The result is then loose stools, bloating flatulence, and abdominal pain from the lactic and acetic acid and CO₂ and hydrogen.

Three types of lactose intolerance:

- Primary Lactase Deficiency
- Secondary Lactase Deficiency
- Congenital Lactase Deficiency
- Primary Lactase Deficiency
 - C/C -13910 genotype is strongly associated with **hypolactasia**
 - Norm for most around the world
 - Age 2-12
 - C/T-13910 and T/T-13910 genotypes associated with **normolactasia** (Lactase persistence)
 - Genetic anomaly for those who have lived for centuries using dairy as staple in diet
- Secondary Lactase Deficiency –
 - Damage to gut

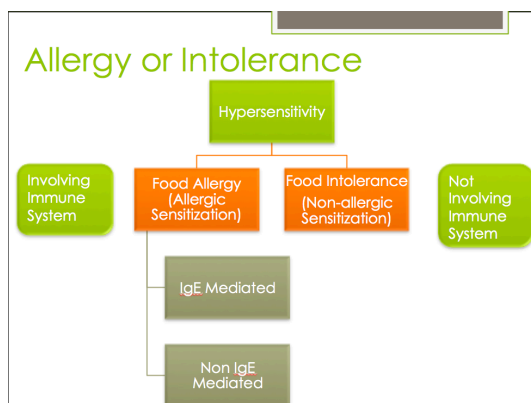
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- Celiac disease, infectious enteritis, or Crohn's disease
- Damage to intestinal mucosa
- Can heal after gut heals
- Preterm Hypolactasia – will resolve when gut develops
- Congenital Lactase Deficiency
 - **Extremely rare –both parents would have to have it**
 - Genetic anomaly, never produce lactase, even in infancy
 - Intractable diarrhea
 - NO BREASTFEEDING
- Cow Milk Protein
- (CMP) Allergy
 - Reaction to protein in cow's milk that gets into breastmilk
 - Protein comes in 4 forms in cow milk
 - Casein (4 different kinds)
 - Whey
 - Lactalbumin
 - Lactoglobulin
 - Primary offender alpha S-1 casein protein
 - CMP is antigen for most breastmilk allergies in 50-65% of all cases (ABM, 2011)
 - **Must avoid all milk products**

Galactosemia

- Inability to digest the sugar galactose
- Rare genetic metabolic disorder
- 1 in about 30,000 babies
- NO BREASTMILK
 - Must drink a low galactose formula, such as soy or elemental formula
- Diagnosed in infant with early blood test (heel prick)
- Prenatal diagnosis by genetic or biochemical testing is available.

Resource: Galactosemia.org



- IgE Mediated
 - Immediate Reaction (minutes -2 hours), Urticaria (Hives), Angioedema, Vomiting, Diarrhea, Eczema, Rhinitis, Anaphylaxis

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- Non IgE Mediated
 - Delayed Reaction (2-7 Days), Vomiting, Constipation, Hemosiderosis (iron overload), Malabsorption, Villous atrophy, Enterocolitis, Proctitis/Proctocolitis, Eosinophilic Esophagitis (EoE)
- Enterocolitis
 - Inflammation of small intestine and colon
 - 1st month onset
 - Vomiting, black or bloody stools, diarrhea
- Enteropathy
 - Loss of proteins into intestine
 - Onset infant and young child
 - Typically from Cow Milk or Soy
- Proctocolitis
 - Inflammation of colon and rectum
 - 1st month onset
 - Cow's Milk, Soy, Egg, Corn
 - Common cause of rectal bleeding
 - Breastfed Babies mainly
 - Resolution in first two years

The 8 Offenders:

Milk, Eggs, Fish, Shellfish, Soy, Treenuts, Wheat, Peanuts

Algorithm for CMA

<http://onlinelibrary.wiley.com/wol1/doi/10.1111/apa.12902/full>

Elimination Diets:

- What to eliminate?
 - Casein or caseinate
 - Casein hydrolysate
 - Dried milk solids
 - Lactalbumin
 - Lactate solids
 - Sweetened condensed milk
 - Whey or whey solids
- Option 1 - 1 food group at time – 2-4 weeks
 - No change? Add back in and start another food group elimination.
 - Continue until all risk foods have been challenged
- Option 2 – Multiple food eliminated – 2-4 weeks
 - Add one food back at a time, wait one week
 - Add in additional group
- Refer, Refer, Refer
 - Allergist
 - GI Specialist
 - Registered Dietician

Common Sense Support

- Reduce inflammation

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- Increase Omega 3's
- They decrease permeability in mucosal lining
- Reduce Omega 6's
- Too many in processed foods
- Unstable, make cells fragile and prone to oxidation
- Eat only natural source
- Pre/Probiotics
 - Eat prebiotic foods that support healthy probiotics in gut not supplements
 - WHY? - Decreases intestinal permeability
- Soluble Fiber (not insoluble)
 - Promotes Bifidobacteria
 - Psyllium, Flaxseed, Veggies
- Increase digestive enzymes

What Can You Do?

- Refer!
- Educate Moms on Nutritional Health Prenatally and Postpartum
- Make sure moms understand differences between lactose intolerance, sensitivities, and allergies.
- Questions?
- info@motherjourney.com
- www.motherjourney.com

Resources:

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