MANAGEMENT OF ALLERGIC COLITIS IN BREASTFED INFANTS

Though babies cannot be allergic to human proteins, they can be allergic to the foreign food antigens that are present in human milk, due to maternal food ingestion. This article focuses on allergic colitis (also known as allergic proctocolitis), a Type IV hypersensitivity reaction that can occur in both infant formula fed and breastfed infants. It does not cover IgE mediated allergies where hives angioedema and anaphylaxis may be possible symptoms.

Typical symptoms allergic colitis may include fussiness, excessive watery stools, stools that are dark (orange, green, brown) when the expected color would be yellow, and even blood or mucus in the stool. Occasionally, an infant will have skin breakdown in the perianal area (known as erosive dermatitis) that will not go away until the offending antigen is taken out of the diet. Up to half of infants with allergic colitis may show additional signs of gastroesophageal reflux (GERD). Common signs of GERD include discomfort during or after feedings, body arching or fussiness when laid flat.

Treatment of allergic colitis consists of a maternal elimination diet. There are several dietary approaches. Most mothers eliminate dairy and soy, because cow milk and soy foreign antigens in human milk most commonly cause infant food allergy symptoms. If a mother does not think that elimination of both dairy and soy is feasible, she should start with elimination of cow milk products first. Some experts recommend simultaneously eliminating cow meat products as well.

Once the offending antigen is eliminated from the diet, parents should be aware that symptoms will gradually improve, usually starting around 5 days after the offending agent is eliminated. It may take up to three weeks for diarrhea and bloody stools to completely resolve.

If an infant continues to have frequent stools, ask the mother to check for hidden soy and dairy products (see table 1). Foods and medications- especially prenatal vitamins- should be checked for hidden products (such as casein, whey and lactose in the case of cow milk food additives). Mothers should be informed that lecithin is a soy-derived food additive. Most of the time, elimination of hidden ingredients will result in symptom improvement. Mothers on a dairy and soy-free diet will often want to know what they can consume ("what’s left?"). Table 2 lists foods that she can eat on a soy and dairy-free diet. If there still is no improvement, elimination of nut products would be next, followed by wheat, and so on. Food elimination advances every 5 to 7 days, if no noticeable improvement is noted.
## TABLE 1
Cow-based Hidden Ingredients

- Butter
- Butter fat
- Butter solids
- Butter flavor
- Buttermilk
- Calcium caseinate
- Caramel color
- Caramel flavoring
- Casein
- Caseinate
- Dried milk
- Galactose
- Lactalbumin
- Lactate
- Lactoferrin
- Lactoglobulin
- Lactose
- Milk
- Milk fat
- Milk protein
- Milk solids
- Naturlose
- Opta Recaldent
- Simplesse
- Sour cream
- Sour milk solids
- Tagatose
- Whey
- Yogurt
Table 2

Breastfeeding moms on a dairy and soy-free diet can eat the following foods:

- All vegetables except for soy. Some super-sensitive babies may also show a sensitivity to "cousins" of soy such as peas or peanuts
- All fruits
- All meats except for beef products
- All grains
- Eggs-occasionally a baby will show some sensitivity, but the majority of the time infants will tolerate this maternal food ingestion

Keep in mind the following:

- Be sure to check food labels for evidence of soy or dairy products every time
- Remember to check the hidden ingredient sheet for hidden dairy products
- Hidden soy ingredients can be listed as lecithin or soy lecithin
- Relapses will sometimes occur after moms have dined out or have consumed prepared foods from the grocer
- Vegetable oils often contain soy and are used in some prepared foods
- Some helpful websites include:

  Enjoylifefoods.com
  Foodallergynetwork.org

Assuming that the infant improves with maternal elimination of soy and dairy, the mother can attempt to add small amounts of either soy or dairy into her own diet after about one to two months of restricted diet. Her diet would need to revert back to the stricter regimen if, while reintroducing the food product, her infant again displays fussiness and adverse stool changes over the next five days.

If it is difficult to identify the offending agent, some mothers are willing to place themselves on a strict elimination diet. This includes either a rice and turkey or a rice and lamb diet. She needs to be sure no other additives are used in preparing these foods. After strict adherence for 5 days she then adds one additional food product that is neither dairy or soy to her diet. Some examples would include a specific vegetable, fruit or oatmeal. Then she observes the infant for symptoms for 5 days. If there is no adverse response, she repeats the same process of adding a food every five days while observing the infant for symptoms.
An alternative to this strict diet is to eliminate all common offenders and slowly add them back. This would include eliminating cow products, soy, citrus fruits, eggs, nuts, peanuts, wheat, corn, strawberries and chocolate. One ingredient is added every 5-7 days.

The mother should be on a multivitamin with minerals while on a restricted diet. This usually entails finding a product that does not include hidden additives that she is trying to avoid. An online search is often helpful. She should consume 1000mg of calcium a day (many calcium products are not cow derived but she should check with the manufacturer).

If signs of GERD are also present, infant positioning and even ranitidine may be needed; however, GERD symptoms may improve in some infants a few weeks after the problem antigen is eliminated. Some infants may only need ranitidine for a month, while for others, treatment until six to twelve months of age may be necessary.

Infants will sometimes experience a setback. For instance, a mother may unknowingly ingest a food containing the offending antigen while dining outside the home. Restaurant personnel may not be entirely aware of hidden ingredients in their own products. Prepared foods at the grocer may not be accurately labeled. For example, a label for rotisserie chicken might only state that it is cooked with vegetable oil, though the oil is partially derived from soy. Another setback can occur after solids are introduced. It is important for parents to check for trace elements in infant baby food. Most baby food manufacturers have helpful charts on their website that will list trace ingredients.

As with infant formula allergies, most breastfed infants with food hypersensitivities will experience resolution of their allergy between 12 and 18 months of age. The process of introduction of a small amount of product as a trial is generally the same.

Allergic colitis does occasionally occur in breastfed infants. Determined mothers can successfully modify their diets in order to eliminate infant symptoms. The majority of infants will eventually outgrow their food sensitivity.

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