



IABLE

Institute for the Advancement of Breastfeeding & Lactation Education

Infant Allergic Proctocolitis and Bloody Stools

Infant proctocolitis goes by many names such as allergic proctocolitis (AP), milk soy protein intolerance (MSPI) or cow's milk protein allergy (CMPA). In this hand out, we will call it allergic proctocolitis, or AP for short. This condition is due to a reaction in the infant's intestines from certain proteins in breastmilk or in formula. This type of reaction is not a classic allergy, as it does not cause swelling, hives or wheezing. AP typically presents with blood-streaked stools in young babies who are otherwise healthy, gaining weight well, and who are generally happy. Cows' milk protein in breastmilk or formula is the most common cause of AP, followed by soy protein. Cows' milk protein or soy protein end up in breastmilk through the parent's diet. Babies can also be exposed to these proteins from cows' milk-based or soy-based formula. The treatment is having the lactating parent stop these foods in their diet or changing formula.

What symptoms do infants have with infant proctocolitis?

Babies with AP have blood-streaked or bloody stools, often with mucous. Mucous by itself without blood is not a concern and is not AP. Infants with AP are usually otherwise well and gain weight adequately. AP is considered a 'benign' or 'non-harmful' condition that gradually goes away by 9-12 months of age, and sometimes sooner.

Infants with more concerning symptoms, such as anemia or poor weight gain have health problems that are not explained by AP and may have a health problem that is more serious.

What else can cause bloody stools in young babies?

While AP is a common and self-limited cause of blood in baby's stools, there are other possible causes of bloody stools. You need to see your infant's physician to determine if there is any concern regarding other possible causes of bloody stools. The diagnosis of AP should be made by your infant's physician.

Anal fissure: This is a tiny tear around the rectum due to hard stools or anal irritation from something like a diaper rash.

- **High milk production:** High milk production has often been observed to be associated with blood-streaked stools in babies. These babies often gain more than the expected amount of weight and may have other symptoms such as large volume frothy stools, forceful or frequent spitting up, abdominal discomfort, flatus, and general fussiness. See our handout on High Milk Production for more information.
- **Infectious colitis:** This is relatively rare in exclusively breastfed infants. These infants will typically have other symptoms such as fever, vomiting, and poor intake.
- **Intussusception:** Intussusception is a condition where part of the intestine folds into, or telescopes, into another part of the intestine. Infants develop pain, appear very ill, and have red currant jelly-colored stools.
- **Necrotizing enterocolitis:** Necrotizing enterocolitis (or NEC) is a life-threatening intestinal condition most common in premature infants while in the neonatal intensive care unit. These infants appear ill with abdominal bloating, vomiting, poor feeding, and either constipation or diarrhea.

- **Meckel's diverticulum:** This is an outpouching of the intestinal wall that can bleed or cause obstruction of the bowel. It can cause a variety of symptoms such as painless bleeding and/or severe abdominal pain. This is rare in infants under 6 months.
- **Food protein induced enterocolitis (FPIES):** this is different from AP. In AP the slight bleeding comes from irritation limited sections of the bowel called the sigmoid and rectum. Enterocolitis is a more extensive form of food protein intolerance involving much more of the bowel. These infants appear ill with vomiting, weakness, and diarrhea. Bloody stools are less common.
- **Early onset inflammatory bowel disease:** this is rare in infants. These infants have diarrhea and blood in their stool, along with poor weight gain.

When do symptoms from AP typically start?

Allergic proctocolitis usually starts between 2 weeks and 5 months of age.

What are common foods that cause AP?

One or more food proteins in the lactating parent's diet may cause allergic proctocolitis, with cows' milk protein being the biggest culprit. Other common foods include soy, eggs, corn, and chicken.

How do we treat allergic proctocolitis?

Treatment involves having the lactating parent avoid offending foods in their diet. Eating just a small amount of the food can trigger bloody stools. Therefore, it is important to ensure that the lactating parent avoids all sources of the food.

Start with cows' milk protein (dairy) elimination for 72-96 hours. If the bloody stools do not gradually diminish, then continue dairy elimination and eliminate soy protein for 72-96 hours. If the bloody stools continue, then milk and soy can be reintroduced into the diet. The parent would need to try eliminating other foods, one at a time, to see what food could be causing the bloody stools. It would be reasonable to eliminate eggs, followed by corn. We recommend working with your infant's physician to discuss parental dietary elimination recommendations.

In some cases, the lactating parent will have tried elimination of a variety of foods, but the blood streaks persist. If the infant is otherwise happy and gaining weight well, and the parent has high milk production, the parent/baby dyad should be seen by a breastfeeding medicine specialist to determine if over-production of milk might be the cause of the blood-streaked stools.

Does breastfeeding need to be interrupted while the elimination diet is initiated?

Breastfeeding does not need to be stopped or interrupted as the parent eliminates food to figure out what is triggering the blood streaks in the baby's stool. The blood streaks in the stool, although alarming, are not associated with anemia or weight loss and AP is considered a non-dangerous illness. If your infant is not feeding well, seems weak, or has vomiting and/or diarrhea, please see your baby's physician, as those are NOT classic signs of AP, and an elimination diet is not the answer to your baby's symptoms.

Once the parent stops eating a food such as dairy, the food protein is out of the breastmilk within a day. The infant's gut lining will heal, and most people notice gradual clearing of the bloody stools over 3-4 days.

How do I eliminate these foods and still eat healthily?

Lactating parents can have healthy balanced diets even if they eliminate one or more food groups. Here are some links to dietary suggestions for lactating parents of infants with infant proctocolitis:

- [Milk Allergy Diet](#)
- [Soy Allergy Diet](#)

When can the lactating parent re-introduce the eliminated foods?

Lactating parents can gradually reintroduce the foods into their diets starting 2-6 months after the blood streaks have resolved. Some parents feel most comfortable waiting until the infant is 9-12 months, when AP would rarely reappear.

This handout is provided for guidance regarding infant allergic proctocolitis. If your infant has blood in their stool, please contact your infant's physician for evaluation and diagnosis first rather than assuming that the baby's condition is allergic proctocolitis.

Resources

- <https://www.hopkinsmedicine.org/health/wellness-and-prevention/milk-allergy-diet>
- <https://www.hopkinsmedicine.org/health/wellness-and-prevention/soy-allergy-diet>