

In the Name of GOD

Allergic Proctocolitis in Infants

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Introduction

- **Definition:** Food Protein-Induced Allergic Proctocolitis (FPIAP)
- **Key Characteristics:** Benign, self-limited inflammation of the distal colon/rectum.
- **Non-IgE-Mediated** Hypersensitivity (Contrast with IgE-CMA).
- **Primary Triggers:** Cow's Milk Protein (CMPA) and Soy Protein.

Epidemiology

- One of the most common cause of rectal bleeding in the first year of life.
- Onset typically within the **first few months**, often within the first few weeks of life.
- Accounts for a significant portion of non-infectious hematochezia cases.
- Common non-IgE mediated food allergy in infancy

Pathophysiology

- Immaturity of the immune system
- Impaired intestinal permeability
- Genetic predisposition
- The gut microbiome

Clinical Presentation

- Healthy, thriving infant (maintaining normal weight gain, activity, and milestones) with blood-streaked stools
- Frequent visible blood in normal or loose stools
- Loose stools with mucus, with or without gross or occult blood
- No systemic symptoms (no failure to thrive, no vomiting, no abdominal distention)

Diagnostic Approach

- Detailed history (feeding, family allergy history)
- Exclude alarming features (poor growth, severe anemia, systemic symptoms)
- Clinical diagnosis supported by response to maternal/infant elimination diet

Diagnostic Challenges

- Clinical overlap with benign causes (e.g., fissure)
- No specific biomarkers for APC
- Stool occult blood is non-specific
- Risk of over-diagnosis leading to unnecessary dietary restrictions

Differential Diagnosis

- Anal fissure
- Enteric infection
- Necrotizing enterocolitis (preterm)
- Intussusception
- Very early onset IBD
- Anatomic lesions (Meckel's diverticulum)
- Food protein-induced enterocolitis syndrome (FPIES)
- Food protein-induced enteropathy
- Eosinophilic gastroenteritis

When to Indication colonoscopy/Biopsy

- Refractory bleeding despite strict 4-6 week elimination.
- Atypical presentation (e.g., proximal involvement).
- To rule out early-onset IBD.

Management Principles

- Mainstay: elimination of offending protein (commonly cow's milk)
- Breastfed infants: maternal elimination diet with dietitian support
- Formula-fed infants: switch to extensively hydrolyzed or amino acid-based formula
- Avoid unnecessary multiple food eliminations
- Regular monitoring of growth and nutrition

Core Challenge: The “Hidden Soy” Pitfall

- **The Issue:** Many first-line EHF's utilize **Soy Protein Hydrolysates** as the protein source.
- **Clinical Implication:** Infants with co-sensitization to both Milk and Soy will fail EHF therapy and require immediate step-up to AAF.

Adjunctive Therapy and Nutritional Safety

- **Title:** Probiotics and Micronutrient Monitoring
- **Probiotics as Adjunct:**
- Specific strains (e.g., *L. rhamnosus* GG) may accelerate bleeding resolution.
- Must be used *in addition to* antigen avoidance.
- **Nutritional Monitoring:**
- Counsel mothers on Ca and Vitamin D supplementation during strict dairy exclusion.
- Monitor for growth velocity during prolonged formula changes

Monitoring & Prognosis

- Symptom resolution typically within 72–96 hours
- Most infants tolerate cow's milk by 12 months
- Reintroduction strategy: gradual re-challenge after 6–12 months
- Excellent long-term prognosis

Take home message

- Allergic proctocolitis is a benign, self-limited condition
- Diagnosis remains clinical and exclusionary
- Avoid over-diagnosis and overly restrictive diets
- Management requires multidisciplinary support
- Reintroduction is crucial to prevent unnecessary long-term avoidance

Thank you

