Rectal bleeding in a breastfed infant

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Background: Rectal bleeding in infants can be a diagnostic challenge. In children younger than one year of age, anal fissures are the most common cause of rectal bleeding. However, anal fissures can hide and delay other rare diagnoses.

Report: We report a twenty-four days old female admitted with rectal bleeding since she was two weeks old. There were no other symptoms, as fever, vomiting or diarrhea. The child was exclusively breastfed. The physical examination revealed an anal fissure at 6am in dorsal position, with no other changes on examination. The mother of the patient excluded dairy products of her diet, with no improvement of symptoms. The laboratory tests revealed peripheral blood eosinophilia (1,2x10^3/μL eosinophils) with no anemia (Hb 10,3g/dL) or other analytical alterations. No virus (rotavirus and adenovirus) was detected in stools and stool culture was negative. Colonoscopy showed discreet erythema of the sigmoid colon mucosa, without ulcers, fibrin or aphthous injuries. Biopsies revealed high number of eosinophils in the lamina propria of sigmoid colon. The patient started an extensively hydrolyzed cow’s milk formula, with symptomatic improvement. However, after four days, there was recurrence of the rectal bleeding, associated with exuberant perianal erythema. Since the rectal bleeding persisted, the patient started an amino acid-based formula. In just a few days, there was a symptomatic improvement. At six months of age the child gradually reintroduced cow’s milk formula, with tolerance. This clinical presentation, with the results of colonoscopy, is a striking feature of food protein-induced proctocolitis (FPIP).

Clinical Relevance of Report: FPIP is a rare cause of rectal bleeding in healthy infants, sometimes mistaken with anal fissures. It is characterized by inflammation of the distal colon due to a non-IgE-mediated reaction to food proteins, most commonly cow’s milk proteins. In exclusively breastfed infants, mother exclusion of cow’s milk and dairy products should be sufficient to stop the symptoms. However food restriction may be difficult to accomplish for mothers. Additionally there are a small number of infants that not respond to food restriction of their mothers or extensively hydrolyzed cow’s milk formula, being necessary to do an amino acid-based formula. This case report pretends to draw attention to a rare diagnosis of rectal bleeding in infants, where clinical suspicion is extremely important.