

Celiac Disease Case Study: Young Child

Part I

Chief Complaint:

Parent brings fourteen month old female (Amy) to the PNP with complaints of intermittent vomiting, occurring for past 2 weeks which has increased in frequency this week.

Past History:

Prenatal: No problems.

L&D: NSVD, Apgar 9,10

Infancy: Breastfed until 12 months; 8 months Hgb 11.3; Lead level normal

Current Health Status:

Amy has had no other health problems. Her development is normal. She was in the 50% for height and weight and head circumference. She has not had a fever or any illness. She was weaned from breastfeeding at 13 months and vomiting began shortly after weaning. Mother thought that she might be intolerant to lactose and started giving her soy formula, but it has not affected the vomiting. Vomiting does not seem to be related to time, type of food, activity or illness. Amy vomits 2-3x/day and has a poor appetite. Frequently the emesis consists of undigested food even after 12 hours after ingestion.

Medications: None

Family History: Only child, lives with both parents. No family history of food intolerance or GI problems.

Physical Exam: Alert, oriented, small, thin, pale 14 month old female.

HEENOT – all central incisors are thin grey/translucent. Delayed eruption of dentition – central incisors at age 13 months

Abdomen – soft, nontender

MS – normal Neuro – nl

What is your differential?

- A. Lactose intolerance
- B. Celiac disease
- C. Viral Illness
- D. Constipation

What diagnostic tests will help you?

- A. CBC
- B. Abdominal X ray
- C. Upper GI
- D. Celiac panel
- E. Dental consult

Results

CBC shows: WBC 4.2, Hgb.11.3, Plt 200,000

Abdominal X ray – normal

Upper GI – delayed gastric emptying

Celiac panel – elevated Deaminated Gliadin ABS IgG: 45.5 (normal is 1-10).

All other markers in normal range. IgA was on lower end of normal 21, (normal is 20-100). Low IgA has been linked to autoimmune disorders.

Plan

Refer to Pediatric Gastroenterologist

Refer to Pediatric Dentist

Part II

Diagnosis

Delayed gastric emptying of unknown etiology -

GI specialist unconcerned about elevated Deaminated Gliadin ABS IgG Dentist – told mother not to worry about grey transparent teeth, they would fall out.

Treatment

Pediatric Gastroenterologist prescribed Elecare formula, Miralax and Prevacid which she continued to take for over the next 16 months. During this time, the vomiting decreased, but was still occasional. Amy frequently complained of abdominal pain and constipation. Her growth improved. She gained 8lbs over the 1 ½ year but often did not feel well.

Her parents were concerned and took her for additional consults. Patient was seen by four different pediatric GI specialists, her pediatrician and her dentist during this time. All providers agreed to continue the prescribed treatment since she was growing and improving. None of the providers had an explanation for Amy's thin, grey transparent teeth.

At age 2 ½, her mother decided to take her to a specialist in GI motility at a Children's Hospital. When she sent Amy's medical records to the GI Motility clinic, they requested that she repeat the Celiac markers which had not been repeated since age 14 months. At this time endomysial antibody IgA was positive, TTG IgA was >100 (normal is <5), all three markers were extremely high and the patient was then referred to the Celiac clinic instead of the GI motility clinic. She was seen by the Celiac team, referred for a small intestine biopsy and diagnosed with Celiac Disease.

How could her providers have prevented this delay in diagnosis by connecting her oral-systemic symptoms?