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Clinical History
A 13-year-old girl presents with abdominal pain, right lower quadrant tenderness, guarding, elevated lipase, and a history of gastroesophageal reflux disease.

Findings
On contrast-enhanced CT images, a heterogeneous low-attenuation intraluminal mass is identified in the stomach (Figure 1), duodenum, and jejunum (Figure 2). Multiple intussusceptions are seen in several segments of the small bowel demonstrating mesenteric fat separating the intussusceptum from the intussuscipiens.

Diagnosis
Rapunzel syndrome.

Differential Diagnosis
The top differential diagnosis includes gastric carcinoma, postprandial food, and intramural mass.

Discussion
A bezoar is a ball of ingested foreign material that collects in the lumen of the gastrointestinal tract. Foreign materials, such as hair, plastic, paper, string, cotton, and prune pits, fail to pass through the pylorus and small intestine. The most common bezoar in a child is a hairball, or trichobezoar. Rapunzel's syndrome occurs when the main portion of the trichobezoar is located in the stomach with extension of the tail into the small bowel and/or right colon.

The incidence of trichobezoar is very low. Approximately 90% of bezoars are seen in girls aged 10 to 19 years. The risk is greater among the mentally retarded, emotionally disturbed, and those with underlying psychological problems. There is usually a history of trichophagia, the compulsive eating of one's hair, and/or trichotillomania, the impulse control disorder of a repeated urge to pull out one's hair. Because the stomach is full all the time, the patient presents with abdominal pain, nausea, vomiting, obstruction, weight loss, and poor appetite. Trichobezoars tend to be large, well-defined, ovoid masses. The typical CT finding is a heterogeneous, mottled intraluminal mass with a meshlike, concentric ring pattern due to debris, barium, and entrapped air. Complications such as intussusception, obstruction, perforation, ulceration, peritonitis, or abscess formation can also be seen. Several other imaging modalities may also be used for diagnosis, but they are not as definitive as CT.

On plain film, there may be a mottled soft-tissue opacity with the shape of a stomach. The outer rim of the bezoar may also be calcified. There may also be signs of bowel obstruction. An upper GI series outlines a filling defect in the stomach or small bowel. Ultrasound examination reveals an echogenic arclike surface with sharp posterior acoustic shadowing. MRI is not as useful as CT, because the images vary depending on the actual contents of the trichobezoar, and the low signal intensity is easily confused with air.

Treatment includes surgical or endoscopic removal. Endoscopy is difficult in most cases due to the large size of the trichobezoar.

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Bibliography

Disclosures:

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