A Girl with Abdominal Pain

A 14-year-old single urban girl was referred to the emergency department of Shahid Mohammadi Hospital, Bandar Abbas, Hormozgan Province, Iran, with pain in epigastric and periumbilical regions. She had a history of abdominal pain and frequent vomiting that began two months ago, as well as trichotillomania from childhood. No other remarkable point was found in her past medical history. Vital signs were: Blood pressure: 110/80 mmHg, pulse rate: 75/min, respiratory rate: 18/min, axillary temperature: 36.5°C. She was conscious and lying in supine position. On physical examination, a mass was detected with 15 × 20 cm dimensions in the left upper quadrant which was found to be mobile.

Laboratory test results: WBC: 6300/mm³, Hb: 9.5 g/dL, HCT: 31.9, MCV: 69.8, PLT: 399000/mm³, total serum protein: 4.6 g/dL, serum album: 3.1g/dL, total bilirubin: 0.8, amylase: 79, direct bilirubin: 0.1 lipase: 20 SGOT: 21 SGPT: 16. On plain abdominal radiography, a hyperdense lesion was detected in the left upper quadrant which continued to the periumbilical region. The mass was firm and mobile.

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What is your Diagnosis?
See the next page for diagnosis.
Photoclinic Diagnosis: Trichobezoar/ Rapunzel syndrome

The patient underwent upper gastrointestinal endoscopy and a huge mass containing hair and dental floss was obvious in esophagus, stomach and duodenum.

Trichobezoar is the result of accumulation of non-digestible food or foreign materials in the gastrointestinal tract. The prevalence of this finding is less than 0.5% in upper gastrointestinal endoscopies. Based on the main component; Bezoar may be divided into the following types: Hairball trichobezoar, phytobezoar, mycobezoar, lactobezoar, trichphythobezoar, pharmacobezoar or pseudobezoar. The most common type is Trichobezoar. It can be localized in stomach or extend to different parts of small intestine. When the bezoar extends to small bowel, it is named Rapunzel syndrome. People with trichobezoar usually have psychotic disorders such as trichotillomania, in which the patient eats her hair and sometimes other thread-like materials such as dental floss, as we found in our patient. The complications of bezoar are gastrointestinal obstruction, bleeding, perforation and sometimes biliary obstruction. If the size of bezoar is small, the gastro-endoscopist can remove it by endoscopy; otherwise it should be removed by open surgery. Because of the huge size and extensions of the bezoar, our patient was candidate for open surgery. A 1.8 kg mass that was 30cm in length was removed from the stomach and duodenum (Figures 3 and 4). The patient was in good conditions in the postoperative period. Psychological consultation was done, and medical and psycho-therapeutic treatment was suggested. The patient had an improving trend during the 6 weeks of follow-up.

References