Chapter 3

COLONIC LITHOBEZOAR IN CHILDREN

Aziz Serhat BAYKARA¹

INTRODUCTION

Bezoars are accumulations of foreign bodies or undigested food in any part of the digestive tract (1). These accumulated objects can be hair, plant fibers or seeds, milk residues and stones (1,2). Its incidence in the general population has been reported to be less than 1% (2). Bezoars are mostly detected in the upper gastrointestinal tract (3,4). The colon is where these substances accumulate less. Primary colonic lithobezoar is an extremely rare condition and may be asymptomatic or cause severe clinical pictures ranging from chronic abdominal pain to mechanical bowel obstruction and even bowel perforation (2,5).

ETIOLOGY

Bezoars are the result of pica syndrome, which is characterized by persistent ingestion of non-nutrients. Although the etiology of pica is not yet known, it is more common in children with low socioeconomic status, mental retardation, and neglect (4). Four types of bezoars, named as phytobezoar, trichobezoar, lactobezoar and lithobezoar, have been defined according to their contents. Phytobezoars, characterized by the accumulation of foods containing high amounts of cellulose, are the most common type (1,3). Trichobezoar is a condition that is mostly located in the stomach and is diagnosed in young female patients with psychiatric disorders. Ingested hair usually accumulates between the folds of the stomach and creates a mass. The clinical picture in which the trichobezoar can reach the small intestine from the stomach has been defined as "Rapunzel syndrome" (2). The formation characterized by undigested milk residues in infants is called lactobezoar.

In the pathogenesis of lactobezoar formation, there are exogenous factors such as synthetic dairy products and drugs that inhibit gastrointestinal motility, as well

MD, Health Science University, Eskişehir City Hospital, azizserhati@yahoo.com, ORCID iD: 0000-0002-6690-8412

General Surgery IV

rectal irrigation, and emptying the colon with ano-rectal manual intervention. More severe cases require a surgical approach.

REFERENCES

- 1. Ferhatoğlu MF. Lithobezoar: A case report and literature review of an infrequent cause of abdominal pain. *Medical Bulletin Sisli Etfal Hospital*. 2019; 53(4): 445-449. https://doi.org/10.14744/SEMB.2018.52714.
- 2. Park SE, Ahn JY, Jung HY, et al. Clinical outcomes associated with treatment modalities for gastrointestinal bezoars. *Gut Liver*. 2014; 8: 400–407. https://doi.org/10.5009/gnl.2014.8.4.400.
- 3. Ozdemir H, Ozdemir ZU, Senol M, et al. Colonic lithobezoar, a rare cause of ileus. *Cumhuriyet Medical Journal*. 2014; 36: 101-104.
- 4. Şenol M, Özdemir ZÜ, Şahiner IT, et al. Intestinal obstruction due to colonic lithobezoar: a case report and a review of the literature. *Case Report in Pediatrics*. 2013; 2013: 854975. https://doi.org/10.1155/2013/854975.
- 5. Alizai Q, Ullah F, Alam J, et al. A rare case of asymptomatic massive colonic lithobezoar in a young child. *Cureus*. 2022; 14(9): e29538. https://doi.org/10.7759/cureus.29538.
- 6. Tokar B, Ozkan R, Ozel A, et al. Giant rectosigmoid lithobezoar in a child: four significant clues obtained from history, abdominal palpation, rectal examination and plain abdominal X-ray. *Europan Journal of Radiolology*. 2004; 49(1): 23-24.
- 7. Sheikh MS, Hilal RM, Misbha AM, et al. Colorectal lithobezoar: A rare case report. *Journal of Indian Association Pediatric Surgeon*. 2010; 15(2): B62-63. https://doi.org/10.4103/0971-9261.70642.
- 8. Olayinka RI, Abubakar SL, Nuraddeen I et al. Iron-deficieny anemia with lithobezoar (pica): A rare cause of intestinal obstruction in a 5-year-old Nigerian child. *International Medical Case Report Journal*. 2018; 11: 225-228. https://doi.org/10.2147/IMCRJ. S175653.
- 9. Aihole JS. Giant colonic lithobezoar: A rare case report. *Journal of Indian Association of Pediatric Surgeons*. 2020;25(2): 103-105. https://doi.org/10.4103/jiaps.JIAPS_24_19.
- 10. Abbas TO. An unusual cause gastrointestinal obstruction: Bezoar. *Oman Medical Journal*. 2016; 26: 127-128. https://doi.org/10.5001/omj.2011.31.