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Fitobezoarın Neden Olduğu İnce Barsak Obstrüksiyonu

Intestinal Obstruction Caused By Phytobezoar

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Özet

Anahtar Kelimeler: Bezoar, ileus, enterotomi

Abstract

Keywords: Bezoar, ileus, enterotomy

DEAR EDITOR;

Bezoars are masses that have been formed by indigested substances within the gastrointestinal lumen (1). Bezoars can be classified in four ways depending on their formation mechanisms. Trichobezoar which contain hair, cilium, pilar; phytobezoar, which is formed as a result of the indigestible phytonutrients; lactobezoar, which is formed by milk and milk products and bezoars, which are formed by other means (2). Phytobezoars are the most widely seen bezoar type. This is generally formed by accumulation of substances such as cellulose, tannin, lignin that are contained in vegetables and fruits and which could not be digested (3-5). Although bezoars mostly position themselves on the stomach, they could rarely pass down to the intestines and cause the ileus syndrome. Only 0,4 to 4% of all of the intestinal obstructions are caused by bezoars (6,7). We have tried to introduce the ileus syndrome that has formed on 45 years old female patient in relation to the phytobezoar and the difficulties related with the diagnosis in this case under the light of the literature.

45 years old female patient, with complaints of pain on the epigastric region and gastroesophageal acid reflux for the last one month. She had sought medical advice from our emergency polyclinic since her stomach complaint has increased for the past 3 days and since she had vomiting. During the external examination that had been performed; intestine noise was normal during auscultation. Sensitivity was present on the epigastric region. Muscular defence and rebound was not present. There was not operation history. Laboratory diagnosis performed was normal in full. The patient was hospitalised with peptic

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ulcer activation?, A. Cholecystitis??, A. Pancreatitis??? provisional diagnosis. During follow up of the patient, whose vomiting and pain complaints has continued, the opacity that has been seen on the stomach from the standing up direct abdomen radiography which was taken approximately 5 hours later, was not present anymore (Figure 1) and intestine type of air-liquid levels were present on theleft hand side.

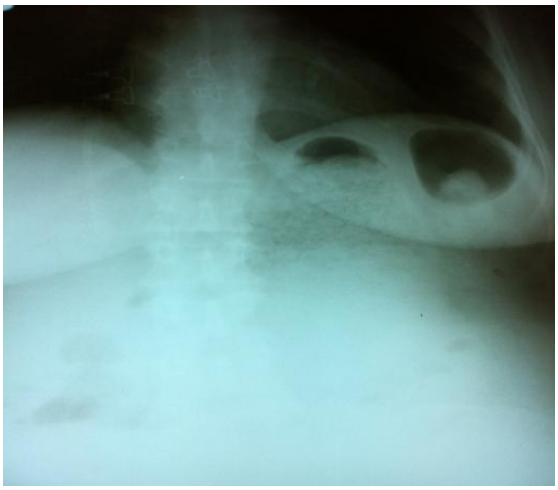

Fig. 1 Bezoar silhouette seen on stomach from the standing up direct abdomen radiography

When the patient was questioned as it is considered that this ileus symptom could be formed through reason of the bezoar, it has been learned that the patient had eaten Asian persimmon from time to time for the last one month. Intestine loops were dilated on the left hand side from the abdomen USG that was taken. There was not any other pathology. Bowel loops were rather dilated and did not contain passages from the abdomen BT with oral contrast that was taken on the patient (Figure 2).

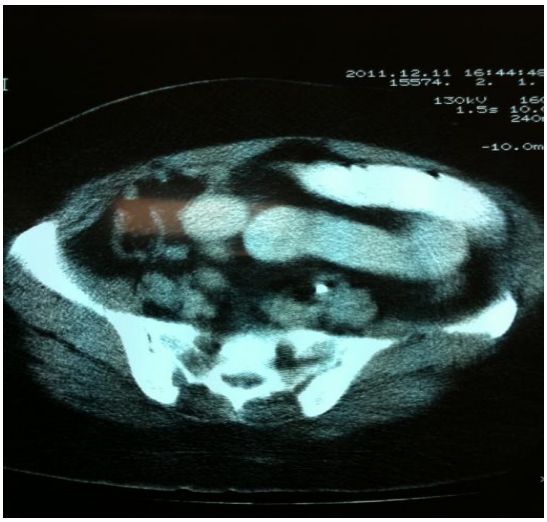

Fig. 2 Dilated bowel loops and interruption of the passage can be seen from the abdomen BT with contrast.

As pain and vomiting had continued during follow up of the patient, laparotomy has been planned. Jejunum loops were rather dilated during the exploration. A hard mass, whose lumen was totally blocked at 140 cm proximal of ileocecal valve, was present(Figure 3). Enterotomy was performed and the bezoar was removed (Figure 4). Primary was repaired. The bezoar had dimension of 4x4x5 cm approximately and it had rather hard consistence. The patient, who did not have problems on her post operation follow up, was discharged on the 5th day as recovered.

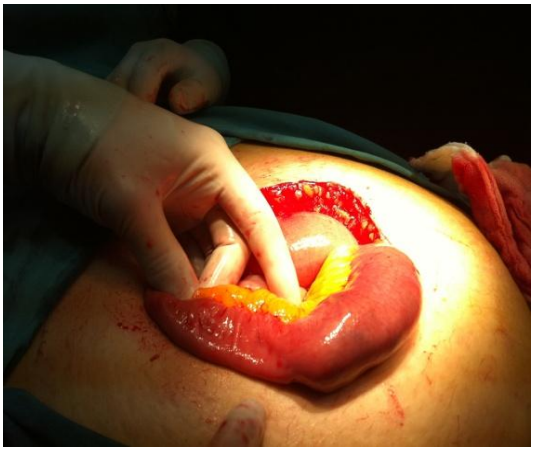

Fig. 3: Bezoar image which has obstructed jejunum totally.

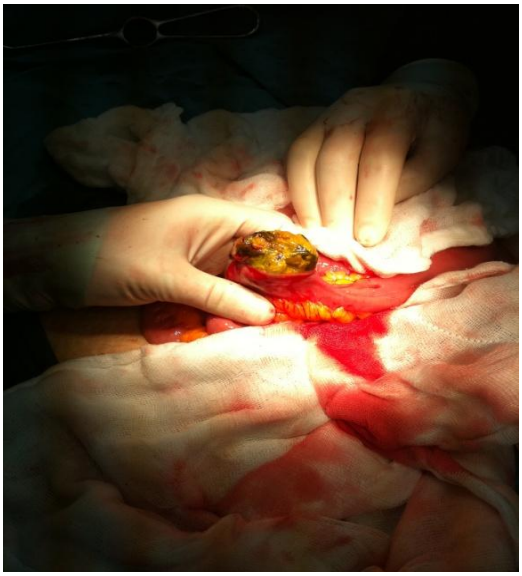

Fig. 4: Removal of the bezoar through enterotomy

The most frequently seen bezoars during daily life are phytobezoars and mostly formed by consuming asian persimmon in excess amounts (8). The history, where the patient has eaten Asian persimmon for the last one month, was present in our case.

Slowing down of the stomach discharge and past stomach operation that causes the stomach acid to reduce are important factors for development of the bezoar (7,9,10). History of operation of the patient was not present in our case. Phytobezoar has most probably formed in relation to the diet that had contained excess amount of fibres.

Bezoars are generally formed on the stomach and causes blockage as they move down towards the intestines (6,7). In our case, the bezoar, which was seen on the stomach from the direct abdomen radiography, has moved and caused obstruction on the jejunum.

The first thing that is required to be performed for bezoar diagnosis is the standing up direct abdomen radiography. The phytobezoar could be seen as foreign substance silhouette. The abdomen BT is more advanced imaging method as compared to direct radiography and to radiography with barium. Bezoars could be monitored from the abdomen BT as a mass whose boundaries are sharp, which is elliptic and which contains air bubbles inside. Oral contrast concentrates on boundaries of the bezoar and leads to formation of an clear image (11,12). A foreign substance silhouette was present in our case from the direct radiography at the location that corresponded to the stomach and this silhouette was not

present from the standing up direct abdomen radiography that was taken 5 hours later approximately and dilatation and air-liquid levels were formed in intestines. Final diagnosis was established from the abdomen BT with contrasts that were taken and total obstruction, which did not allow the contrast substance to pass through, was determined. Therefore, decision for laparotomy was taken.

Bezoars provide symptoms in accordance with the location they are present. The most important symptom of our patient was vomiting. This in turn, was related to pylorus blockage and to the obstruction on the jejunum that had developed at later stage. Intestine obstruction related to the bezoar can be seen on the jejunum and on the proximal ileum in classical sense (10). In our case, the bezoar had caused blockage on 140 cm proximal of ileocecal valve.

Surgical treatment is performed on ileus related to bezoars. If the bezoar could be broken up, then it can be stroked towards the cecum. If it is hard, then the bezoar could be removed through enterotomy. If necrosis is formed on the intestine, then segmented resection is to be performed (7). Since the bezoar was hard in our case, it has been removed through enterotomy.

As the conclusion, the ileus that is formed in relation to the bezoar is a situation that is seen very seldom. Differential diagnosis should also be considered for patients who seek medical advice for reason of vomiting and detailed medical history should be obtained. Radiological examinations (direct abdomen radiography, abdomen BT with contrast) could be beneficial for the final diagnosis.

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