An unusual cause of small bowel perforation: apricot pit

Nadir bir ince bağırsak delinme nedeni: Kayısı çekirdeği

Koray ATİLA, Sanem GÜLER, Seymen BORA, Hüseyin GÜLAY

Ingestion of foreign bodies can be a common problem, especially among children, alcoholics, and psychiatric and senile patients. Foreign bodies with smooth edges usually do not pose significant problems, but a sharp foreign object that is not retrieved immediately may penetrate the wall and cause complications. Ingested foreign bodies usually pass the intestinal tract uneventfully, and perforation occurs in less than 1%. In this study, we report a case of small bowel obstruction with perforation in a 73-year-old female due to the accidental swallowing of an apricot pit.

Key Words: Apricot pit; foreign body; small bowel perforation.

CASE REPORT

A 73-year-old female was admitted to the emergency department of our hospital with a three-day history of diffuse abdominal pain, nausea and vomiting. She had vomited her digested daily meal several times and had not passed any gas for two days. She was well before this attack, except for chronic constipation. She had a history of prior abdominal hysterectomy-bilateral salpingo-oophorectomy operation.

Although she had decreased skin turgor and dry mucosal surfaces, there was no sign or symptom of neurologic deficit or psychiatric illness. On physical examination, abdominal distension and accompanying hyperactive bowel sounds on each upper abdominal quadrant were present. She had a low-midline abdominal incision scar, and no inguinal or incisional hernia was seen. There was generalized tenderness on palpation of the right upper quadrant, and ileus and guarding were present. The abdomen was diffusely tender, and there was evidence of peritonitis. The hemoglobin level was 7.0 g/dL, and the white blood cell count was 18,000/mm^3. The patient was operated on, and a small bowel obstruction was found to be due to an apricot pit. The perforation was repaired, and the patient made a good recovery.

In this study, we report a case of small bowel obstruction with perforation in a 73-year-old female due to the accidental swallowing of an apricot pit.

Department of General Surgery, Dokuz Eylül University, Faculty of Medicine, Izmir, Turkey.

Correspondence (İletişim): Koray Atilla, M.D. Dokuz Eylül Üniversitesi Tıp Fakültesi, Genel Cerrahi Anabilim Dalı, Balçova 35330 İzmir, Turkey. Tel: +90 - 232 - 412 29 17 Fax (Faks): +90 - 232 - 412 23 88 e-mail (e-posta): katila@deu.edu.tr

tion. No electrolyte imbalance was observed. A plain X-ray of the abdomen revealed multiple air-fluid levels of the small bowel and no free air in subdiaphragmatic areas. Abdominal ultrasonography revealed only dilated loops of intestinal segments, which confirmed the presumptive diagnosis of ileus. On the 24th hour of admission, she developed an “acute abdomen”. She underwent an exploratory laparotomy, which revealed a peritoneal soiling due to distal ileum perforation caused by an apricot pit. It was loosely sealed off by an omentum patch (Fig. 1). The peritoneal cavity was irrigated with warm normal saline. Segmental resection of the terminal ileum and end to end anastomosis was performed. A closed wound suction drainage tube was placed in the pelvis. Histologic examination revealed focal mucosal necrosis and foreign body type granular reaction on mucosal, submucosal and muscular layers. Necrotic areas were seen extending to the serosal layer.

On the postoperative 10th day, an enterocutaneous fistula developed. It was treated initially with a combination of total parenteral nutrition and somatostatin, then daily output was followed. Since it was considered a low-output fistula, somatostatin treatment was discontinued within 72 hours. The fistula resolved spontaneously and she was discharged from the hospital on postoperative 24th day.

**DISCUSSION**

Accidental ingestion of a foreign body occurs rarely and perforation occurs in less than 1% of ingested bodies. The most common sites of intestinal perforation by a foreign body are the ileocecal and rectosigmoid regions. Clinical presentations vary, depending on the site of perforation and the extent and duration of peritonitis. As these patients usually do not remember the foreign body ingestion, the final diagnosis is frequently delayed. Computed tomography scans and ultrasonography may help clinicians in this challenging situation; however, in most patients, the diagnosis is not confirmed until the surgical intervention.

The risk factors for foreign body ingestion are mental retardation, dental prothesis, alcohol abuse, and rapid eating. In our case, the patient had dental plates and rapid eating habit. On questioning, she explained that she had a fruit garden and reported eating a lot of apricots rapidly during the week. Although an apricot pit is not sharp and pointed, it was impacted to the distal ileum region, causing necrosis with perforation. A myriad of swallowed foreign bodies have been reported. Those most commonly associated with complications are toothpicks, fish and chicken bones and needles. Although most of the sharp-pointed objects entering the stomach will pass through the remaining gastrointestinal tract without incident, the risk of complication caused by a sharp-pointed object is as high as 35%. Sharp, pointed foreign bodies often cause perforations in the gastrointestinal tract; endoscopic removal is advisable if they are within the reach of available endoscopes. With advances in endoscopic techniques, foreign bodies can be extracted safely in these patients. The majority of foreign body ingestions occur in the pediatric population, and children most often ingest toys, coins, safety pins, and ballpoint pen caps, whereas adults prevalently tend to have problems with meat and bones.

Normal physical examination findings and absence of symptoms in children do not eliminate the possibility of foreign body ingestion especially in the presence of positive history.

After 14 days, the fistula of the patient resolved with administration of gastrointestinal decompression, total parenteral nutrition and intravenous somatostatin infusion.

In conclusion, although intestinal obstruction and perforation occur rarely after foreign body ingestion, this situation should always be considered in the differential diagnosis, and early therapeutic precautions should be taken especially in selected patients.

**REFERENCES**


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**Fig. 1.** Appearance of the apricot pit perforating the distal ileum.