

Dropped Gallstones Mimicking Colon Cancer

Leor Perl MD¹, Yoseph A. Mekori MD^{1,2,3} and Adam Mor MD^{1,2}

¹Department of Medicine and ²Laboratory of Allergy and Clinical Immunology, Meir Medical Center, Kfar Saba, Israel

³Sackler Faculty of Medicine, Tel Aviv University, Ramat Aviv, Israel

KEY WORDS: colon cancer, computed tomography, gallstones, laparoscopic cholecystectomy

IMAJ 2009; 11: 697–698

Each year more than 500,000 Americans undergo gallbladder surgery, and the low rate of complications, decreased hospital stay and increased patient satisfaction have made the laparoscopic approach the procedure of choice [1,2]. However, there are two main complications that are more prevalent in the laparoscopic approach: bile duct injury and dropped gallstones, as illustrated in the case presented below.

PATIENT DESCRIPTION

A 58 year old woman was admitted to our department after a few days of abdominal discomfort and soft stools, accompanied by hematochezia. Her medical history was remarkable for laparoscopic cholecystectomy a couple of years earlier. Physical examination was positive for fresh rectal blood. She was hemodynamically stable. Laboratory tests showed hemoglobin 10.5 g/dl. The working diagnosis focused on colorectal cancer, and the patient underwent a colonoscopy. An ulcerated, large edematous circumferential semi-annular lesion was observed at depth 10 cm. To our surprise, the biopsied samples failed to reveal neoplastic features. A second colonoscopy was performed, this time guided by transrectal ultrasound. The transrectal ultrasound showed findings highly suspicious of a tumor, but the

pathological results were again without evidence of neoplastic cells. Both pathological exams indicated an inflammatory process, ulcerated tissue, covered by a fibroleukocytic exudate, granular tissue, preserved histological architecture and abundance of leukocytes. To clarify the picture, computed tomography of the abdomen was performed, which to our surprise showed multiple gallstones surrounding the rectum [Figure]. The patient refused surgery. She was discharged soon after diagnosis and failed to show for a follow-up visit.

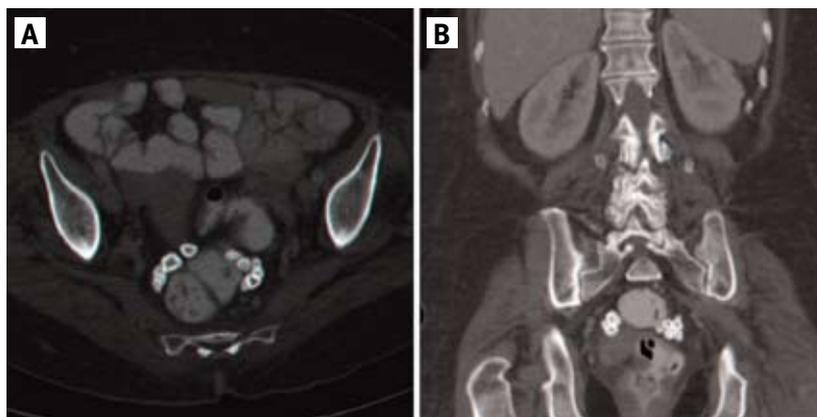
COMMENT

Laparoscopic cholecystectomy is the most common method for treating symptomatic gallstones. The exact incidence of spillage of stones during this procedure is unknown since most cases are asymptomatic. Some authors report spillage of stones due to gall bladder rupture in up to one-third of cases [3]. Gallstones may be trapped

in the hepatorenal recess (Morison’s pouch), in the spleen bed, around the rectum, or in the recto-uterine pouch (Douglas’ pouch). Patients may suffer from abdominal pain, fever and weight loss due to abscess formation associated with the stones. The rate of dropped gallstones causing abscess is low, 0.3% [4]. Imaging studies may support the diagnosis [5].

To the best of our knowledge, this report (supported by the CT findings) is the first to document an inflammatory reaction accompanying dropped gallstones. It is possible that the extraluminal pressure and the shear stress caused by the gallstones triggered the inflammatory mucosal lesions. In our case, the patient presented with abdominal discomfort, bloody stools and weight loss. Colonoscopy examination suggested tumor mass, but guided biopsies failed to support it. CT scan established the correct diagnosis of dropped gallstones. It is therefore suggested that CT scan be considered for patients with a

Computed tomography scan of the abdomen. Both horizontal [A] and frontal [B] views demonstrate dropped gallstones around the rectum.



history of laparoscopic cholecystectomy presenting with abdominal discomfort prior to any invasive procedure.

Correspondence:

Dr. Y.A. Mekori

Head, Dept. of Medicine B and Laboratory of Allergy and Clinical Immunology, Meir Medical Center, Kfar Saba 44281, Israel

Phone: (972-9) 747-2198

Fax: (972-9) 747-1311
email: ymekori@clalit.org.il

References

1. Bar-Meir S. Gallstones: prevalence, diagnosis and treatment. *IMAJ Isr Med Assoc J* 2001; 3: 111-13.
2. Harju J, Paakkonen M, Eskelinen M. Comparison of the quality of life after minilaparotomy cholecystectomy versus laparoscopic cholecystectomy: a prospective randomized study. *IMAJ Isr Med Assoc J* 2007; 9: 147-8.
3. Viera FT, Armellini E, Rosa L, et al. Abdominal spilled stones: ultrasound findings. *Abdom Imaging* 2006; 31: 564-7.
4. Morrin MM, Kruskal JB, Hochman MG, Saldinger PF, Kane RA. Radiologic features of complications arising from dropped gallstones in laparoscopic cholecystectomy patients. *AJR Am J Roentgenol* 2000; 174: 1441-5.
5. Mahmood SK, Tomford JW, Rosenblatt S, Gordon S. Dropped gallstones disguised as a liver abscess. *Cleve Clin J Med* 2008; 75: 316-18.