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Dropped Gallstone Causing Subhepatic Abscess

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Abstract: **Iatrogenic perforation of the gallbladder during laparoscopic cholecystectomy is a known occurrence resulting in dropped stones in the peritoneal cavity. Complications like infection, inflammation, fibrosis, adhesion, cutaneous sinus formation, and abscesses; though uncommon, can be dangerous. Surgeons and radiologists should be aware of these complications and their related morbidity. The author describes a delayed complication of gallstone presenting as a subhepatic abscess seven year post laproscopic cholecystectomy.**

Keywords: **dropped gallstone, cholecystectomy complications, gallstone abscess, subhepatic abscess.**

I. INTRODUCTION

Laparoscopic cholecystectomy is the treatment of choice for gallstones as it is minimally invasive procedure. However, it still has adverse effects and potential complications. Iatrogenic perforation of the gallbladder during laparoscopic cholecystectomy is a recognized occurrence with dropped stones in the peritoneum. This is in contrast to the reported incidence of dropped gallstones after open cholecystectomy, which is extremely rare [1]. In a retrospective study of 3686 patients who underwent laparoscopic cholecystectomy, gallstone spillage occurred in 254 patients or 6.9% [2]. Unretrieved dropped stones occur in 1% to 2.4% of total laparoscopic cholecystectomies [2, 3]. Although abscess formation most commonly occur in the first year post cholecystectomy, delayed abscess formation has been described 15 years following cholecystectomy [4].

II. CASE REPORT

A 48 year old male presenting with vague right upper quadrant pain for few months with past medical history consisted of hypertension and laproscopic cholecystectomy seven years back. The intraoperative notes state that the laparoscopic cholecystectomy was uncomplicated without mentioning of gallbladder perforation or stone spillage. On examination, the patient was vitally stable with tenderness in the right upper quadrant upon palpation. The requested laboratory findings were within normal limits. Ultrasound was performed initially to exclude biliary obstruction or CBD stone which was negative. CT scan of the abdomen and pelvis pre and post IV contrast was requested and showed 2.2 cm subhepatic peripherally enhancing collection with small hyperdense focus centrally representing the gallstone associated [figure 1]. Complimentary targeted ultrasound of the subhepatic space was performed and shows the typical appearance of gallstone as hyperechoic focus with posterior acoustic shadowing [figure 2].

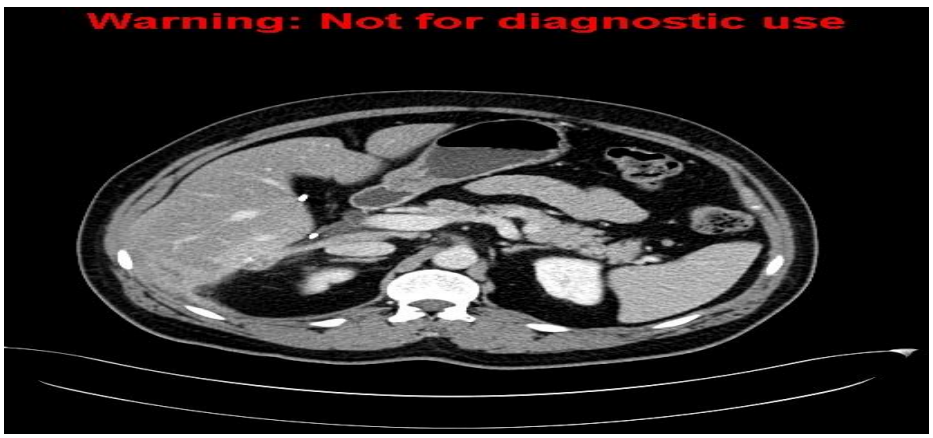

Figure1: 2.2 cm peripherally enhancing abscess in the subhepatic space showing internal hyperdense focus with surrounding mild fat stranding.

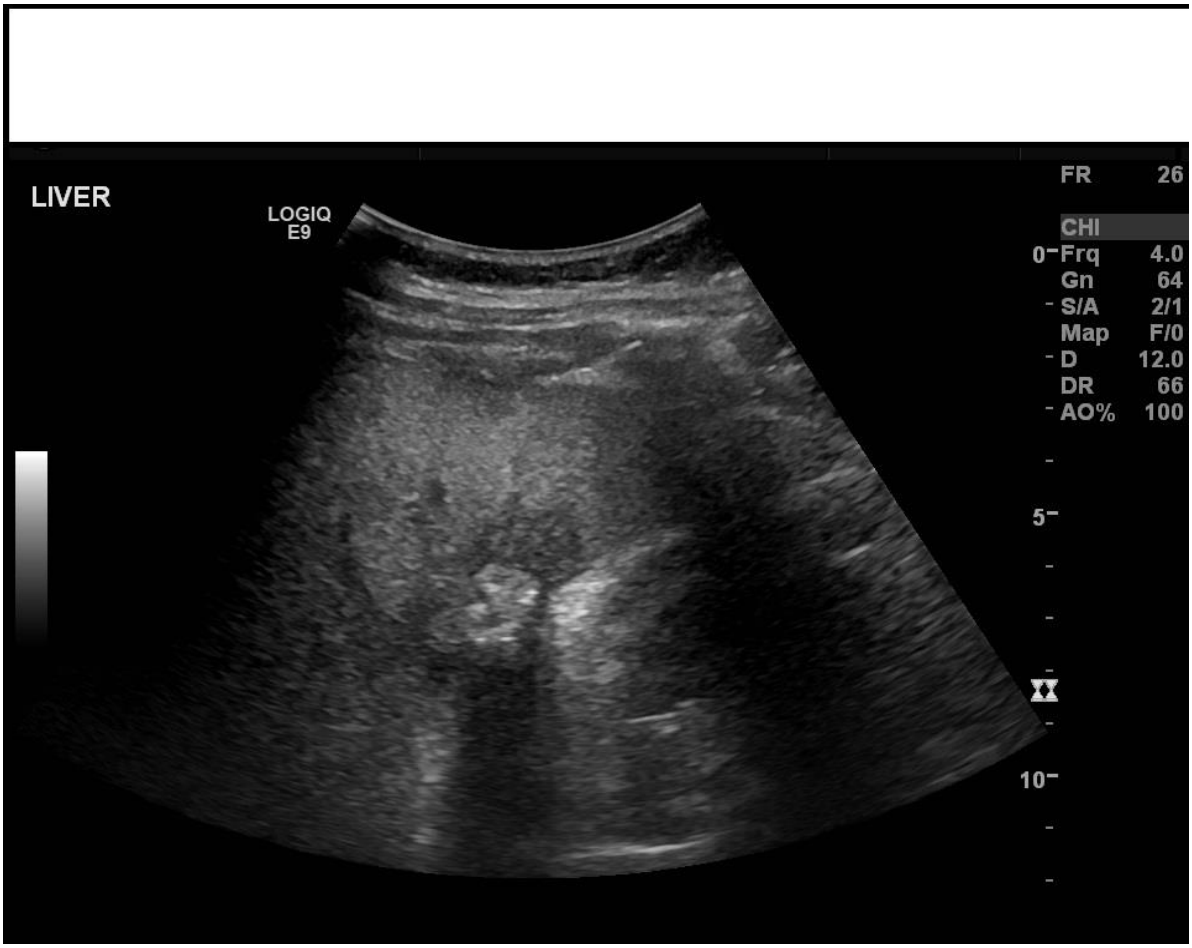

Figure 2: targeted ultrasound of the subhepatic space shows hyperechoic lesion with posterior acoustic shadowing typical of gallstone.

III. DISCUSSION

The benefits of laparoscopic over open cholecystectomy are significant and include reduction in the mortality rate, reduction in the length of hospital stay and allow patients to return to their activity sooner. In contrast to laparoscopic cholecystectomy during which gallstone spillage is an acknowledged potential event, few cases of dropped gallstone complications have been reported after open cholecystectomy [1]. The incidence of gallbladder perforation ranges in the literature with a reported rate of 10% to 40% and retained stones in 1%–13% of laparoscopic cholecystectomies [5]. Although gallbladder perforation and stone spillage is relatively common, the delayed complications are rare. In a retrospective review of 547 patients with dropped gallstones, only 8 patients (0.08%) developed a postoperative abscess requiring reoperation [6]. As dropped gallstone in the peritoneal cavity may act as a source of future infection, every effort should be made to avoid spillage of stones during dissection of the gallbladder and cystic duct and during retrieval of the gallbladder through the abdominal wall.

IV. CONCLUSION

Gallbladder perforation and dropped stones during laparoscopic cholecystectomy is a known complication. The majority of cases are clinically silent; however complications can present in a variety of ways and sometimes many years after surgery.

REFERENCES

[1] P. K. Papasavas, P. F. Caushaj, and D. J. Gagné, “Spilled gallstones after laparoscopic cholecystectomy,” Journal of Laparoendoscopic and Advanced Surgical Techniques A, vol. 12, no. 5, pp. 383–386, 2002

[2] J. Diez, C. Arozamena, L. Gutierrez et al., "Lost stones during laparoscopic cholecystectomy," HPB Surgery, vol. 11, no. 2, pp. 105–109, 1998.

[3] J. C. Woodfield, M. Rodgers, and J. A. Windsor, "Peritoneal gallstones following laparoscopic cholecystectomy: incidence, complications, and management," Surgical Endoscopy and Other Interventional Techniques, vol. 18, no. 8, pp. 1200–1207, 2004.

[4] A. R. Arishi, M. E. Rabie, M. S. Hussain Khan et al., "Spilled gallstones: the source of an enigma," Journal of the Society of Laparoendoscopic Surgeons, vol. 12, no. 3, pp. 321–325, 2008.

[5] M. T. Brueggemeyer, A. K. Saba, and L. C. Thibodeaux, "Abscess formation following spilled gallstones during laparoscopic cholecystectomy," Journal of the Society of Laparoendoscopic Surgeons, vol. 1, no. 2, pp. 145–152, 1997

[6] M. Schäfer, C. Suter, C. Klaiber, H. Wehrli, E. Frei, and L. Krähenbühl, "Spilled gallstones after laparoscopic cholecystectomy. A relevant problem? A retrospective analysis of 10,174 laparoscopic cholecystectomies," Surgical Endoscopy, vol. 12, no. 4, pp. 305–309, 1998.