

FIGURE 2 - Completion of extended right hepatectomy

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GALLBLADDER CANCER AS INCIDENTAL FINDING IN TWO STAGE RESOLUTION OF GALLSTONE ILEUS

Câncer de vesícula biliar como achado incidental encontrado na resolução de íleo biliar em dois tempos

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DISCUSSION

With the advent of ALPPS, it became possible to achieve hypertrophy of FLR at 75% on average, in a quick way and over a mean period of nine days⁴. However, the authors reported high morbidity and mortality rates, particularly with regard to the initial surgery, with high rates of biliary fistula and intraoperative bleeding.

In our case, with the use of BRCN, there is no need for extensive hepatic mobilization. Thus, it is possible to perform the first procedure with a smaller abdominal incision. By making two columns of denatured liver tissue we eliminate the collateral branches between segments III and IV, with excellent results in the remnant liver hypertrophy (158%). Furthermore, the occurrence of biliary fistula reduces significantly and, in the second surgery, the liver parenchyma can be cut with a scalpel in a quick and simple bloodless way.

We believe that necrosis induced by radiofrequency is a strong metabolic stimulus for migration of angiogenic factors and liver regeneration, adding an important contribution for FLR hypertrophy, since the increase in our report was far above the average of the initial work. It is not possible to draw conclusions from a single report. Further studies are needed, and is already underway our case series.

Thus, using BRCN in two stage hepatectomies represents a new technique to facilitate the procedure. Its use in conjunction with portal ligation, which we named ALRPS procedure, is easy to perform and has its own advantages, especially with regard to the reduction of surgical trauma of a complex hepatotomy and its complications (perioperative bleeding, prolonged surgical time), as well as obviate the dissection of hepatic ligaments.

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INTRODUCTION

Gallstone ileus (GI) is a rare complication of biliary pathology when a bile stone from gallbladder or exceptionally from the main bile duct, cause an obstruction of the intestinal lumen¹⁰. Gallstone ileus incidence has remain constant through the years in 0,9 cases for 100.000 admissions/year⁶.

The diagnosis is usually difficult because of the absence of specific symptoms, and sometimes by the partial remission of them during the migration of the bile stone through the intestinal lumen. This situation usually delays the consultation until there is greater compromise of the patient's general condition. The imaging studies, either simple radiology, ultrasound or computerized axial tomography of the abdomen are useful in the early diagnosis¹. The initial treatment for GI is the reanimation and stabilization of the electrolyte imbalance that might present on this patients and later perform the surgical resolution of the bowel obstruction.

The objective of this report is to present the finding of a gallbladder cancer in the two-stage resolution of a GI and discuss some aspects about the treatment of this disease.

CASE REPORT

Seventy-two years old female, with previous coronary heart disease, that look for medical assistance due to epigastric and right upper quadrant abdominal pain plus vomiting of a few days of evolution. Her physical exam showed tenderness on the right upper quadrant, without palpable mass. The laboratory test resulted with leukocytosis of 14900 cel/mm³, C reactive protein of 104 mg/dl and all others were normal. A plain abdominal X-ray (Figure 1) and abdominal ultrasound were performed, and showed pneumobilia associated with an ovoid image in the mid jejunum with a change in the caliber of the bowel. With the diagnosis of GI a exploratory laparotomy was performed, with findings of two big bile stones at the mid jejunum. A longitudinal enterotomy was performed, with enterolithotomy and closure in one plane of suture. The patient evolved without complications and was discharged on the fifth day after the surgery.



FIGURE 1 - Plain abdominal x-ray showing small bowel dilatation and pneumobilia

One month after the surgery, the patient remained asymptomatic. A new ultrasound was performed that showed a scleroatrophic gallbladder without evidence of cholelithiasis and a common bile duct of 5 mm. The patient rejects the surgery for cholecystectomy and closure of the bile fistulae, and was maintained in ambulatory controls.

Two years after the surgery, she had episodes of colic abdominal pain, associated with jaundice and fluctuant choluria. An abdominal ultrasound and a cholangiomagnetic resonance revealed alithiasic schleroatrophic gallbladder, with dilatation of the extrahepatic bile duct and choledocolithiasis. With these findings, exploratory laparotomy was decided for cholecistectomy and exploration of the choledocus. In the surgery is found a subhepatic adherencial process with a schleroatrophic gallbladder, persistency of an active cholecystoduodenal fistulae and dilatation of the extrahepatic bile duct of 12 mm. A cholecistectomy with resection in block of the fistulous tract with the compromised duodenum was performed, with exploration of the common bile duct extracting various pigmentary bile stones, choledocostomy with Kehr catheter nº 16 and closure of the duodenum in one plane. The patient evolved without signs of complication and was discharged at the third day after surgery.

Histopathology of the surgical specimen was pT1b (Figure 2). After 24 months of follow up the patient remained asymptomatic without signs of local or systemic recurrence.

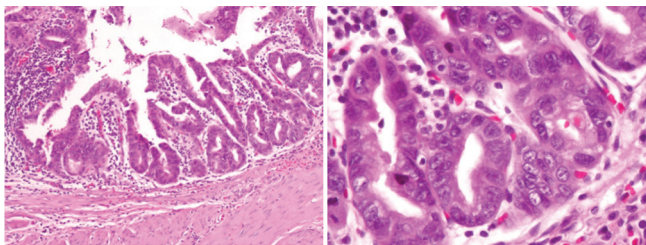


FIGURE 2 - Epithelial neoplasm with tubulo-papillary pattern, cells with anisocaryosis, hyperchromatism, occasionally prominent nucleolus and atypical mitosis

DISCUSSION

The GI accounts for 1-4% of intestinal obstruction and can reach up to more than 20% when are considered only patients over 60 years⁵. The obstruction occurs at any level of

the gastrointestinal tract, but the more frequent site is distal ileum (>60%)⁸. The gastroduodenal obstructions due to biliary stone can be presented as gastric retention syndrome or Bouveret's syndrome⁴.

The clinical diagnosis is not easy, because of the slow and intermitent evolution of the disease; in this stage image exams can be helpful. The plain abdominal x-ray can show presence of pneumobilia, intestinal dilatation with hydroaerial levels and radiologic evidence of ectopic stone, or Rigler's triad. The abdominal ultrasound can show presence of pneumobilia, confirm the presence of gallstones and occasionally demonstrate the presence of a stone either in bile digestive fistulae or in intestinal lumen. Abdominal computerized tomography has proven to be usefull in the preoperative diagnosis and allows to characterize the patient's clinical status, also the magnitude of the obstruction.

For surgical treatment several alternatives has been proposed. The first, corresponds to the enterolithotomy or intestinal resection as only treatment without other intervention. This treatment option usually is performed in patients with surgical high risk or in whom the life span are lower because of their comorbidities⁷. The second, is called "two-steps resolution"; this modality contemplate an enterotomy or intestinal resection as first step, and 4-6 weeks after the resolution of the GI, the cholecistectomy is performed with repair of the bile digestive fistulae⁹. The third, is a "one-time" surgery that contemplate a enterolithotomy or intestinal resection, cholecistectomy and repair of the bile digestive fistulae in the same operative act; however, this modality is associated with higher morbidity and is recommended for younger patients, without comorbidities and with low surgical risk⁸. The laparoscopic surgery is also an option of treatment that has proven to be effective for the GI with different alternatives previously discussed^{2,6}. There are reports of spontaneous resolution and evacuation of GI with conservative non-surgical treatment; but, it evolve with worse outcomes in terms of morbidity and mortality in comparison with the surgical treatment³.

The patients treated with two-steps surgery can reject the second intervention if they do not present symptoms after four weeks, or some surgeons might obviate this procedure in elderly patients with absense of residual lithiasic disease in control ultrasonography. We believe that the risk of gallbladder cancer should be considered in these patients during their evolution, because, even though infrequent, this population has higher risk than the population in general with cholecystolithiasis alone¹¹.

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