

prominent nucleoli and a high mitotic rate, with a certain degree of nuclear and nucleolar atypia. Immunohistochemically, the cells are positive for vimentin, actin and desmin (Fig. 2).⁹

The prognosis for primary adrenal LMS is poor and is related to tumor stage, local invasion and distant metastasis. Microscopically, the number of mitosis per high power field seems to be related with survival⁴: mean survival is 8.4 months in patients with more than 10 mitoses/field and reaches 48 months in cases with less than 10.¹⁰

Primary adrenal pleomorphic LMS is an extremely rare variation, and only 4 cases were found on PubMed.¹⁻⁵ With a high grade of malignancy, histologically they behave as a non-encapsulated mass with a solid pattern, areas of necrosis, and a defined cytological atypia. They are highly pleomorphic, with large cells and very irregular nuclear sizes, lobulated nuclei, prominent nucleoli, and a high mitotic rate per high power field. Out of the 4 cases, 3 were women, and mean age was 49 (28-63). In 2 cases, the predominant symptom was abdominal pain, while one was an incidentaloma. Three cases presented metastasis at diagnosis or in the following 12 months. Treatment was affected by extraglandular involvement; 2 patients received chemotherapy and radiotherapy, one patient underwent surgery, and the remaining case treatment is unknown.^{1,3-5}

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Late Diagnosis of Occult Gallbladder Carcinoma by an Implant in a Laparoscopic Trocar Site[☆]



Diagnóstico tardío de carcinoma oculto de vesícula biliar por implante en puerto laparoscópico

Introduction

Perforation of the gallbladder during cholecystectomy occurs in approximately 20% of the cases, and gallstones are lost in

about 40% of these procedures.¹ Complications are rare, and the most frequent are intraabdominal or abdominal wall infections. We report the case of a patient who had developed an abdominal wall mass 3 years after cholecystectomy. The final histologic diagnosis was adenocarcinoma of gallbladder origin.

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Case Report

The patient is a 69-year-old male who was admitted to our hospital due to constitutional symptoms and an abdominal mass that required further study. His medical history included type 2 DM, HTN, diverticulosis of the colon, and bipolar disorder. Previous surgical history included traumatic amputation of a lower limb and laparoscopic cholecystectomy due to chronic cholecystitis 3 years previously.

Clinical symptoms were abdominal pain of a month duration located in the mesogastrium and a weight loss of 24 kg, with no vomiting or changes in bowel habit. Physical examination with palpation detected a painful, non-pulsatile mass in the umbilical region that seemed to be attached to the abdominal wall. Lab workup upon hospitalization was normal. Abdominal CT with contrast demonstrated a round lesion with a hypodense (necrotic) center in the abdominal wall of the umbilical region, with an approximate size of 3.6 cm and apparent intraluminal extension (Fig. 1). MRI confirmed a tumor measuring 4 cm×3.3 cm×3.5 cm with peritoneal involvement, but no relationship was observed with the intestinal loops. Images of satellite lesions were also detected, which were suggestive of small peritoneal tumor implants. Core needle biopsy was positive for malignant cells and suggested adenocarcinoma of intestinal origin (Fig. 2).

Gastroscopy and colonoscopy ruled out further malignancy. CEA levels were normal, but CA 19.9 was elevated at 2000. PET-CT did not identify any lesions other than the abdominal mass. With these findings, we decided to operate and performed a midline sub- and supra-umbilical laparotomy. An umbilical tumor was observed, which was granulomatous in appearance and contained several rounded inner lesions, giving the impression of gallstones. The lesion had focal contact with the greater omentum, and tumor implants were identified. Extensive tumor resection was carried out, including the greater omentum and peritonectomy. For wall closure, we used several continuous monofilament sutures, and it was not necessary to add mesh, which was also ruled out due to the risk of tumor recurrence.



Fig. 1 – Abdominal CT with IV and oral contrast: round lesion with a hypodense (necrotic) center in the midline of the abdominal wall at the umbilical area, approximately 3.6 cm.



Fig. 2 – Intraoperative image: mass with granulomatous appearance containing several round lesions that give the impression of gallstones.

The patient presented an uneventful recovery, and was discharged on the 7th postoperative day. Six months later, however, the patient died due to intestinal obstruction secondary to carcinomatosis.

The final pathology report confirmed that the lesion was a poorly differentiated infiltrating adenocarcinoma with predominant micropapillary features (positive for CK 7, 20, 19, CEA, and CD X2), suggestive of an extrahepatic primary gallbladder tumor.

Discussion

Laparoscopic cholecystectomy has become the treatment of choice in symptomatic cholelithiasis, with an incidence of occult cancer of 1%-2%.² Incidental perforation of the gallbladder during the intervention can cause bile and gallstones to be released into the abdominal cavity, which even become lost in one-third of the cases.

Approximately 7%-8.5% of these lost gallstones can cause complications. The most frequent is the formation of abdominal wall and intraabdominal abscesses, although other complications include the formation of cutaneous or interloop fistulae, granulomas, or obstruction symptoms.³⁻⁶ Cases of empyemas and bronchopleural fistulas have also been reported, although they are uncommon.

Certain factors, such as signs of cholecystitis, the presence of multiple calculi (>15), pigment gallstones, large stones (>15 mm), or age, increase the risk for complications.^{1,6} Treatment is based on the drainage of abscesses and antibiotics, and gallstone extraction is recommended.

One of the most uncommon complications, but with a poorer prognosis, is the development of tumor implants in the laparoscopy ports when the gallbladder tumor is not diagnosed preoperatively, with an incidence between 14% and 30%.^{7,8} This may occur in localized tumors (T1/T2) as well as in advanced stages (T3/T4). Perforation during cholecystectomy

or injury to the parietal peritoneum during surgery can increase the risk of implants.⁹

The time interval between the intervention and relapse can range between 2 weeks and 4 years and, in most cases, at the time of diagnosis there is also carcinomatosis or distant metastasis. In general, prognosis is poor, with a mean survival of 10 months, and 5-year survival is 10%.

In the case that we describe, the cholecystectomy was difficult due to chronic inflammation and intense adherences, so the gallbladder was not bagged and was removed in fragments. As no mass was detected macroscopically, the pathology study was done routinely, which reported a gallbladder with signs of chronic cholecystitis, and no occult carcinoma was identified.

Based on the possible complications, the authors recommend extracting all free calculi and always performing complete gallbladder extraction with an endo-bag.

Conflict of Interest

The authors have no conflict of interests.

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Secondary Breast Angiosarcoma: Multifocal Recurrence in a Postmastectomy Breast Reconstruction Flap[☆]



Angiosarcoma secundario de mama: recidiva multifocal en colgajo autólogo utilizado en la reconstrucción

Due to the increase in breast-conserving surgery with adjuvant radiotherapy for the treatment of early-stage breast cancer, there has also been an increase in the incidence of radio-induced sarcomas.¹ Angiosarcomas are malignant tumors derived from the vascular endothelium. Presentation in the breast can be primary or secondary to radiotherapy.

Radiation-associated angiosarcoma (RAAS) is seen in primary breast cancer patients treated with breast-conserving surgery and radiotherapy. By definition, it is histologically different from the initial tumor requiring radiation. The recorded prevalence is 0.05% and incidence is 0.16%.² The risk of developing RAAS of the breast is greater in the first 5–10 years

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