Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Results: After the start of quarantine, there has been a decrease in the number of visits to the emergency department. Acute pathologies such as cholecystitis present at diagnosis with more advanced and severe degrees of evolution compared to those diagnosed before the pandemic. Gallbladder perforation occurs in 12% of acute cholecystitis, with a mortality rate of 16%. In our case, according to Neimeier’s classification, it is a subacute perforation type II (frequency 45.9%) with a pericholecystic collection and fistulization towards the abdominal wall, an unusual presentation.

Conclusion: The new global epidemiological situation causes fear of infectious-contagious state to prevail over the appearance of new symptoms. This favours a delay in the diagnosis and treatment of acute and chronic pathologies, which then manifest in the patient in more advanced stages and require more complex treatments.

EP240
LAPAROSCOPIC
CHOLECYSTECTOMY-INDUCED BILE DUCT INJURIES – SURGICAL REPAIR EXPERIENCE AT A REFERRAL CENTER

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Purpose: Bile duct injuries (BDI) are amongst the most feared iatrogenic injuries associated with laparoscopic cholecystectomy (LC) and entail high morbidity. Early diagnosis is crucial to improve surgical repair success which should be performed at high volume specialized centers. The authors review the surgical repair of laparoscopic cholecystectomy-induced BDI (LC-BDI) performed at their institution.

Method: A retrospective analysis of the surgical repair of LC-BDI from January 2005 to May 2017 was performed. The following parameters were evaluated: type of injury; time from LC to BDI diagnosis and to surgical repair; surgical repair procedure; and postoperative morbidity and mortality.

Results: During the study a group of 35 patients was identified, from which 57.1% were referred from other hospitals. Mean age was 56.1±14.4 and 60% of the patients were female. Intra-operative BDI diagnosis was made in 9 patients (25.7%); early after the surgery (<6 days) in 15 patients (42.9%) and late after the surgery (>6 days) in 11 patients (31.4%). Classification of the BDI according to the Bismuth classification: type I, 15%; type II, 50%; type III, 19%; type IV, 12%; and type V, 4%. Median time to surgical repair was 20 days. The following surgical repair procedures were performed: hepaticojejunostomy, 16 (45.7%); hepaticoduodenostomy, 6 (17.1%); hepaticocholedochostomy, 3 (8.6%); choledochojejunostomy, 3 (8.6%); drainage, 3 (8.6%); choledochooduodenostomy, 2 (17.2%); choledoco-choledochostomy, 1 (8.6%); and choledocal suture, 1 (8.6%). The initial surgical repair was curative in 77.1% patients, with the remaining patients needing additional procedures (endoscopic, percutaneous, or surgical). There were 2 deaths (5.7%).

Conclusion: Despite the decrease in LC-BDI rate they remain a significant complication and many times recognized at a late time and carrying higher morbidity. Prevention should be the main focus, but in case of an injury early diagnosis and treatment in a specialized center are fundamental.

EP241
SYNCHRONOUS GALLBLADDER CANCER AND CHOLANGIOCARCINOMA: BAD LUCK OR GOOD CHANCE?

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Introduction: Biliary cancers are a diverse group of tumors that arise from the bile duct epithelium, that includes intrahepatic or extrahepatic cholangiocarcinoma to gallbladder cancer. Despite improvements in treatment and diagnosis, they are often diagnosed at an advanced stage and associated with poor prognosis with limited treatment options. Simultaneous presence of cancer in the gallbladder and in the biliary tree could be due synchronous malignancies, local metastasis (peri-neural, lymphatic or vascular) or to metastasis.

Methods: Case report of synchronous gallbladder cancer and cholangiocarcinoma and literature review.

Results: The authors present a clinical case of a 68 years old male patient referred to our hepatobiliary surgery unit because of an suspicious polyp on the anterior wall of the gallbladder diagnosed by ultrasound. MRI described a simple gallbladder polyp and no other doubtful findings. Patient was submitted to a laparoscopy cholecystectomy. Histopathology revealed a gallbladder adenocarcinoma. Patient was proposed to hepatico duodenal ligament lymphadenectomy and hepatic segmentectomy, of IV and V segments. There were no metastatic lymph nodes but a intrahepatic cholangiocarcinoma was noticed. Histopathology and metastatic workup revealed a moderately differentiated gallbladder adenocarcinoma (T2a G2 N0 ILV0 IPN0 M0) and moderately differentiated intrahepatic cholangiocarcinoma (T1a N0 ILV0 IPN0 M0).

Conclusion: It is possible for two different foci of malignancy to arise within the same dysplastic environment. In this case, the absence of continuousness between the two tumors, the nonexistence lymph node extension, vascular or peri-neural invasion favors the hypothesis of synchronous neoplasms. It is essential for the clinician, as well as, the pathologist to maintain a high index of suspicion while evaluating such lesions.

EP242
SUCCESSFUL RECONSTRUCTION OF BILE DUCT INJURY IN COVID 19 PATIENT: A CASE REPORT

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Conclusion: Despite the decrease in LC-BDI rate they remain a significant complication and many times recognized at a late time and carrying higher morbidity. Prevention should be the main focus, but in case of an injury early diagnosis and treatment in a specialized center are fundamental.
A 37-year-old woman presented to the emergency room with a 1-week history of abdominal pain. On examination, she had pain in the right upper quadrant that worsened after meals and was febrile with a temperature of 38.3°C. Laboratory studies demonstrated leukocytosis (white blood cell count of over 13,000), elevated inflammatory markers, and normal liver function tests. An ultrasound confirmed acute cholecystitis and pericholecystic fluid. Per hospital protocol, COVID-19 PCR was performed despite no respiratory symptoms. The PCR detected SARS-CoV-2. The risk-benefit was analyzed and the patient was taken to the operating room for an open cholecystectomy.

The gallbladder was found with severe inflammation. A cholecystectomy was performed with a fundus-cystic technique. During the procedure, a choledochal duct injury was identified, and an intraoperative cholangiogram was requested, showing lesion Strasberg-E1. The hepatobiliary surgeon was requested who evaluated the case and decided to perform an early biliodigestive derivation (hepaticojejunostomy). After the procedure, the patient developed respiratory acidosis and hemodynamic instability and was classified as having COVID-19 with severe illness. The patient was intubated for 6 days, then extubated and kept on high flow oxygen and nasal cannula as respiratory parameters improved. Eighteen days after admission, she was discharged to go home.

**Results:** During the subsequent follow-up visit, a postoperative day 30 there were no operative or medical complications. A Cholangioresonance was requested, on day 90 postoperative, which showed functional hepaticojejunal anastomosis.

**Conclusion:** As described in the literature, up to 50 percent of patients with perioperative COVID-19 infection develop pulmonary complications. This patient presented metabolic and respiratory deterioration, requiring mechanical ventilation for 6 days. The case presented a surgical challenge due to the type of injury and the infectious control precautions required to operate on SARS-CoV-2 positive patients. Complex medical management was also required. Careful multidisciplinary management results in positive patient outcomes when dealing with complicated surgical cases.

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**EP243**

**ACUTE CHOLECYSTITIS AS A DIAGNOSIS OF MUCINOUS CYSTIC NEOPLASIA OF THE GALLBLADDER. A LITERATURE REVIEW**

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**Purpose:** Mucinous cystic neoplasms (MCNs) of the gallbladder are extremely rare, benign, unicocular or multilocular cystic tumors that contain septations. We present a case diagnosed incidentally after emergency cholecystectomy for acute cholecystitis.

**Method:** 69-year-old woman with epigastric pain of 24 hours of evolution associated with nausea and fever. No jaundice. 14,000 leukocytes, CRP: 33. Normal bilirubin, gamma-GT, and alkaline phosphatase. Positive Murphy’s sign. Abdominal ultrasound: acute cholecystitis.

Surgical treatment: laparoscopic cholecystectomy, showing acute edematous cholecystitis. No complications in the postoperative period.

AP: mucinous cystic neoplasm (MCN) with low-grade dysplasia.

**Results and conclusions:** MCNs of the gallbladder are rare, and no established guidelines for appropriate management have been developed.

It’s benign cystic proliferations of the hepatobiliary epithelium. Lesions originate in the liver in 85% of cases and affect women more frequently, with a mean age at presentation of 45 years.

Its origin remains unclear. Previous studies have hypothesized that originate from ectopic remnants of embryonal gallbladder tissue and aberrant hamartomatous bile ducts.

Discrepancies across the literature exist regarding the malignant potential. Some authors believe that approximately 13% of cystadenomas have dysplastic changes that can progress to a malignant form.

If suspected, ultrasound or CT-guided fine needle aspiration for biopsy is generally not recommended as it increases the chances of tumor spread in the peritoneal cavity.

The only consistent consensus across the literature is that all suspected MCNs originating in the gallbladder should be imaged, surgically removed, and evaluated under the microscope to determine the nature of the disease.

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**Postoperative cholangioresonance. Green mark: hepatojejunal anastomosis, blue mark choledochal duct remnant. The red mark shows a defunctionalized segment of jejunum.**