A Tale of Two Cancers: Synchronous Gallbladder and Rectal Cancer

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Introduction

- Gallbladder carcinoma is a relatively rare entity with an estimated incidence of only 1.13 cases per 100,000 in the United States
- Conversely, colorectal cancer is the third leading cancer worldwide
- Synchronous gallbladder and colon cancer are exceeding rare with only a handful of case reports[1-6]
- Both gallbladder and colorectal carcinomas have well established management guidelines when found independently but no guidelines when found synchronously

Presentation

- 81 yo Male
- Cancer #1:
  - Colonoscopy demonstrated partially obstructing 6 cm mass at rectosigmoid junction
  - Stage III, pT3, N1a, M0 moderately differentiated adenocarcinoma of the mid to upper rectum, CEA 2.3
- Cancer #2:
  - CT Abdomen/Pelvis demonstrates a large gallbladder polyp
  - Stage II, pT2a N0 M0 gallbladder carcinoma incidentally discovered after laparoscopic cholecystectomy 3/2024

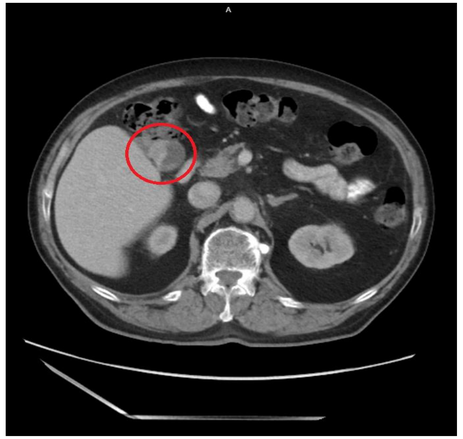
Course

- Laparoscopic cholecystectomy
- **POD10:** Short course neoadjuvant radiotherapy for rectal cancer over 5 days (5 Gy x5 with final dose 25 Gy)
  - Unable to undergo neoadjuvant chemotherapy due to new onset ischemic CHF
- **1 month post-op**: Laparoscopic partial hepatectomy (segment 4B, 5), portal & retroperitoneal lymphadenectomy , CBD exploration with excision of cystic duct stump, sigmoid colostomy for large bowel obstruction
- **9 months post-op:** Robotic-assisted low anterior resection c/b pelvic abscess s/p IR drain placement

[A]



[B]





[A] CT Coronal view of gallbladder mass [B] CT axial view of gallbladder mass [C] CT sagittal view of rectal mass

Discussion

- Management of stage III rectal cancer consists of total neoadjuvant therapy followed by surgical resection
- Management of stage II gallbladder carcinoma consists of surgical resection followed by adjuvant chemotherapy
- Chemoradiation selection in these incredibly rare synchronous tumors is controversial
- It is necessary to determine if the gallbladder cancer is primary versus colorectal metastasis
  - Histologic assessment is not sufficient, immunohistochemistry is recommended[3]
- Patients with colorectal cancers are at an increased risk for secondary primary malignancy[7]
  - Risk factors include, age ≥70, male sex, COPD, cirrhosis, and dyslipidemia
  - However, biliary cancer risk was decreased in those with rectal cancer specifically (SIR = 0.90, 95% CI = 0.83–0.97)
- However, recent studies show gallstones (OR = 1.14, 95%CI, 1.05–1.25, $P = 0.003$) and gallbladder polyps (OR = 1.23, 95%CI, 1.15–1.31, $P < 0.001$) had a significantly increased risk of colorectal cancer[8]
  - Colonoscopy recommended in those with gallbladder disease

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