Recurrent Metastatic Melanoma Presenting as Acute Cholecystitis

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Introduction

The metastatic potential of melanoma to the gastrointestinal system is well known. Classically, small bowel has remained the most common victim with as much as 60% of patients with M1 disease having tumor present in the small intestine at the time of death. The biliary system is not immune to this either with 15% of the same population having metastases identified at autopsy. The role of surgery is unclear in these patients, but does seem to confer a survival benefit in the fewer than 100 total patients described in the English literature. This case will discuss an 80 year old man who underwent cholecystectomy for cystic duct obstruction from metastatic melanoma. He has since survived more than the average 8.4 months since his surgery supporting the potential survival benefit to cholecystectomy in these patients.

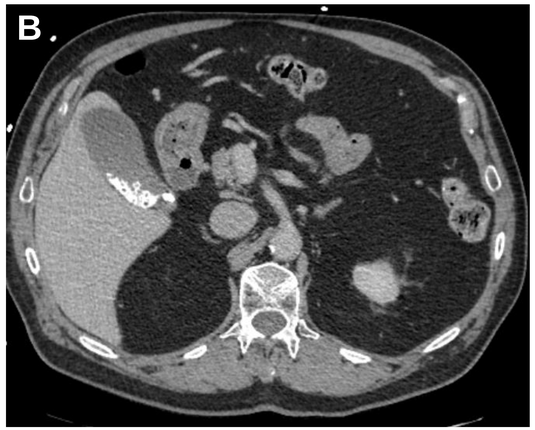
Presentation

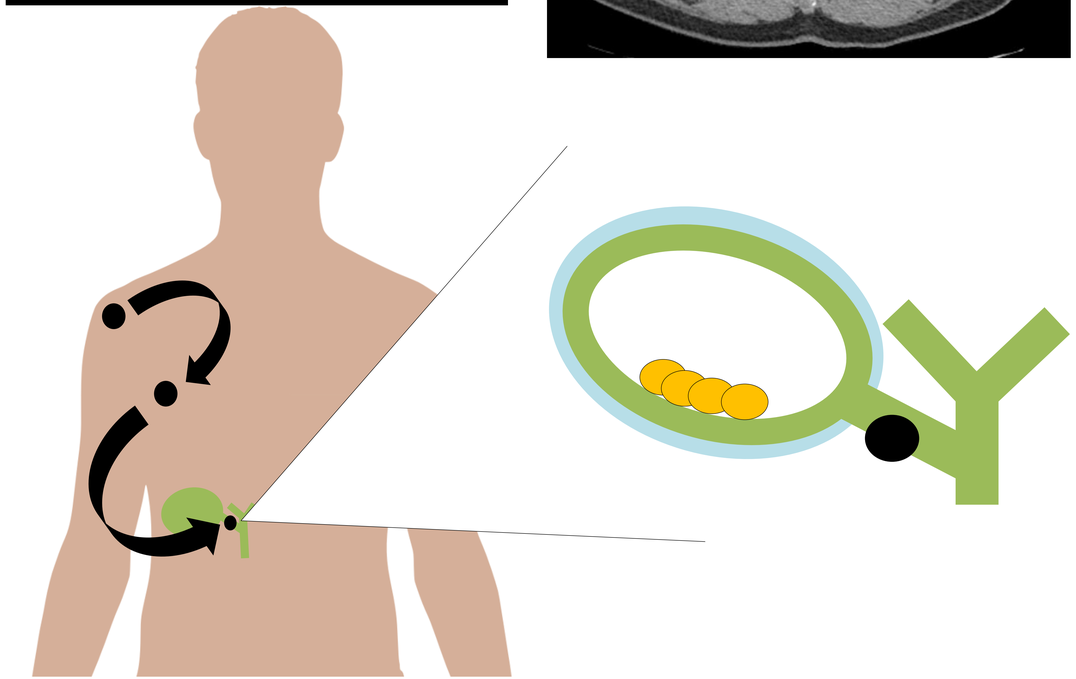
- An 80 year old male presented to the ED with 3 days of right upper quadrant pain after a Thanksgiving Day meal.
- Remission from T3 N1 M0 melanoma 3 years prior treated with wide local excision and Keytruda
- Physical exam demonstrated right upper quadrant pain and a positive Murphy's sign.
- **Image A:** Right upper quadrant ultrasound demonstrating stones, gallbladder wall thickening, and pericholecystic fluid**.**
- **Image B:** CT results demonstrating cholelithiasis.
- Patient was then offered a laparoscopic cholecystectomy.

Procedure

- Tense gallbladder, decompressed.
- Chronic inflammation.
- Difficult retraction and friability resulted in tearing at the fundus.
- Critical view obtained and remainder of case was completed in the standard fashion.







Follow up

- Pathology demonstrated malignant melanoma compressing the cystic duct.
- PET with high uptake in right neck with subsequent dissection (0/13 lymph nodes positive).
- Brain imaging negative.
- Oncology observing with every 3 month follow up.

Discussion

- 15% of patients with metastatic melanoma have biliary metastases at autopsy.
- Accounts for 50% of metastatic disease to the biliary system.
- Most common presentation is as cystic duct obstruction and acute cholecystitis.
- Primary biliary melanoma has been reported in only about 40 cases.
- Primary tumors must have the following characteristics:
  - Solitary and arising from the mucosa
  - Papillary or polypoid
  - Display junctional activity
  - Exclusion of other primary sites
- The role of surgery remains unclear and ranges from palliation to resection.
- Cholecystectomy does seem to improve survival.
- Mean survival time for metastatic melanoma is about 8 months.

References

1. Metastatic malignant melanoma of the gallbladder: a case report and review of the literature. (n.d.). Illinois.Edu. Retrieved March 11, 2023, from https://oce-ovid-com.proxy2.library.illinois.edu/article/00008390-200212000-00012/HTML
2. Riva, G., Villanova, M., Eccher, A., Luchini, C., Motta, F., Bernasconi, R., & Barbareschi, M. (2018). Metastatic malignant melanoma to the gallbladder. Case report and review of the literature. Pathologica, 110(1), 68–71. https://pubmed.ncbi.nlm.nih.gov/30259913/
3. Guida, M., Cramarossa, A., Gentile, A., Benvestito, S., De Fazio, M., Sanbiasi, D., Crucitta, E., & De Lena, M. (2002). Metastatic malignant melanoma of the gallbladder: a case report and review of the literature. Melanoma Research, 12(6), 619–625. https://doi.org/10.1097/00008390-200212000-00012
4. Samplaski, M. K., Rosato, E. L., Witkiewicz, A. K., Mastrangelo, M. J., & Berger, A. C. (2008). Malignant melanoma of the gallbladder: a report of two cases and review of the literature. Journal of Gastrointestinal Surgery: Official Journal of the Society for Surgery of the Alimentary Tract, 12(6), 1123–1126. https://doi.org/10.1007/s11605-007-0432-4
5. Sawyer, E., Tran, K., Kalpakos, L., & Ratnayake, S. (2022). Metastatic melanoma of the gallbladder in a patient with acute cholecystitis: a case report and review of the literature. International Surgery Journal, 9(3), 664. https://doi.org/10.18203/2349-2902.isj20220640