Metastatic Breast Cancer Presenting as Painless Jaundice


1Rowan University School of Osteopathic Medicine, Department of Medicine, Stratford, NJ
2Kennedy Health Alliance, Division of Gastroenterology, Voorhees, NJ
3Kennedy University Hospital, Division of Hematopathology, Cherry Hill, NJ

Introduction

Breast cancer is the most commonly diagnosed cancer in women in the United States. Treatment options are wide-ranging based on a multitude of factors, including extent of disease and receptor positivity. Following treatment, a relapse-free interval ≥ 2 years carries a more favorable prognosis. We present a case involving a female with history of breast cancer and relapse-free interval of 15 years who unfortunately presented with metastatic disease involving the liver, bone, and lymph nodes.

Case Report

- 56 year old female presented for evaluation of painless jaundice, first noticed by family members within one week prior to arrival
- PMH significant for breast cancer 20 years ago treated with right mastectomy with adjuvant chemotherapy and radiation. Cleared by Oncology 5 years post-treatment
- Right upper quadrant ultrasound revealed poorly defined mass in right lobe of liver, sludge within gallbladder, and intrahepatic ductal dilatation suggesting distal common bile duct obstruction
- Follow up MRCP showed extensive hepatic metastases with innumerable liver lesions
- Patient underwent ERCP, where a pancreatic duct stent was deployed but common bile duct could not be cannulated
- Internal/external biliary drainage catheter was placed by Interventional Radiology secondary to complete, abrupt obstruction of distal common bile duct
- Hepatic lesion biopsy was positive for primary mammary malignancy

MRI of abdomen: axial image showing extensive hepatic metastases with innumerable liver lesions of varying shape and size.

Papanicolaou stain, (A, 40x) showing numerous large atypical cells with high nuclear to cytoplasmic ratios. H&E stain (B, 10x) of the core biopsy showing this infiltrate within the liver parenchyma. Additional immunohistochemical stains show these cells are positive for GATA3 (C, 10x), GDCDFP-15 (D, 10x), mammoglobin (E, 10x), and ER (F, 10x).

Discussion

- A review of the literature revealed only a select number of cases where patients presented with painless jaundice deemed secondary to metastatic breast cancer. This is the first such case in which the patient already had a previous diagnosis of breast cancer, irrespective of prior treatment.
- In patients with malignant obstruction, biliary stenting has been shown to improve jaundice and deliver improved quality of life.
- For unresectable malignant biliary obstruction, palliative treatment options include surgical bypass, percutaneous drainage, and endoscopic drainage with plastic or metal biliary stents. Studies comparing these treatment options in this patient population concluded that endoscopic metal stents are the treatment of choice.

Conclusion

- In patients with known malignancy, the development of jaundice may indicate hepatic or biliary metastasis with bile duct obstruction.
- While a multidisciplinary approach to treatment is necessary, biliary stenting to relieve obstruction is a viable option for palliation.

References