

INTRODUCTION

Adenocarcinoma is the most common type of hepatic metastasis (75%) followed by small cell carcinoma (5.9%) and neuroendocrine carcinoma (4.6%).

Squamous cell carcinoma (SCC) is rarely metastatic to the liver, representing only 1.4% of all cases.

CASE PRESENTATION

A 68-year-old female underwent an outpatient colonoscopy for rectal bleeding and was found to have a rectal mass involving the posterior vaginal wall. Biopsies from the rectal and vaginal lesions showed invasive SCC with venous invasion. The carcinoma was p16⁺ representing a high-risk human papilloma virus (HPV) induced SCC.

CT of the chest, abdomen and pelvis showed the vaginal mass and a nodular liver suggestive of cirrhosis. In preparation for palliative chemotherapy, blood work was obtained and showed elevated liver enzymes: AST 127, ALT 65, ALP 1133 and bilirubin 4.8. Abdominal ultrasound and subsequent MRCP demonstrated cirrhosis and ascites without biliary obstruction. Serologic work up was unremarkable for viral, autoimmune or metabolic etiologies of liver disease. A non-targeted, trans-jugular liver biopsy showed diffuse infiltration of SCC with biliary and sinusoidal involvement. The hepatic venous pressure gradient was 12mmHg which confirmed portal hypertension in the setting of infiltrative metastasis.

HISTOPATHOLOGY

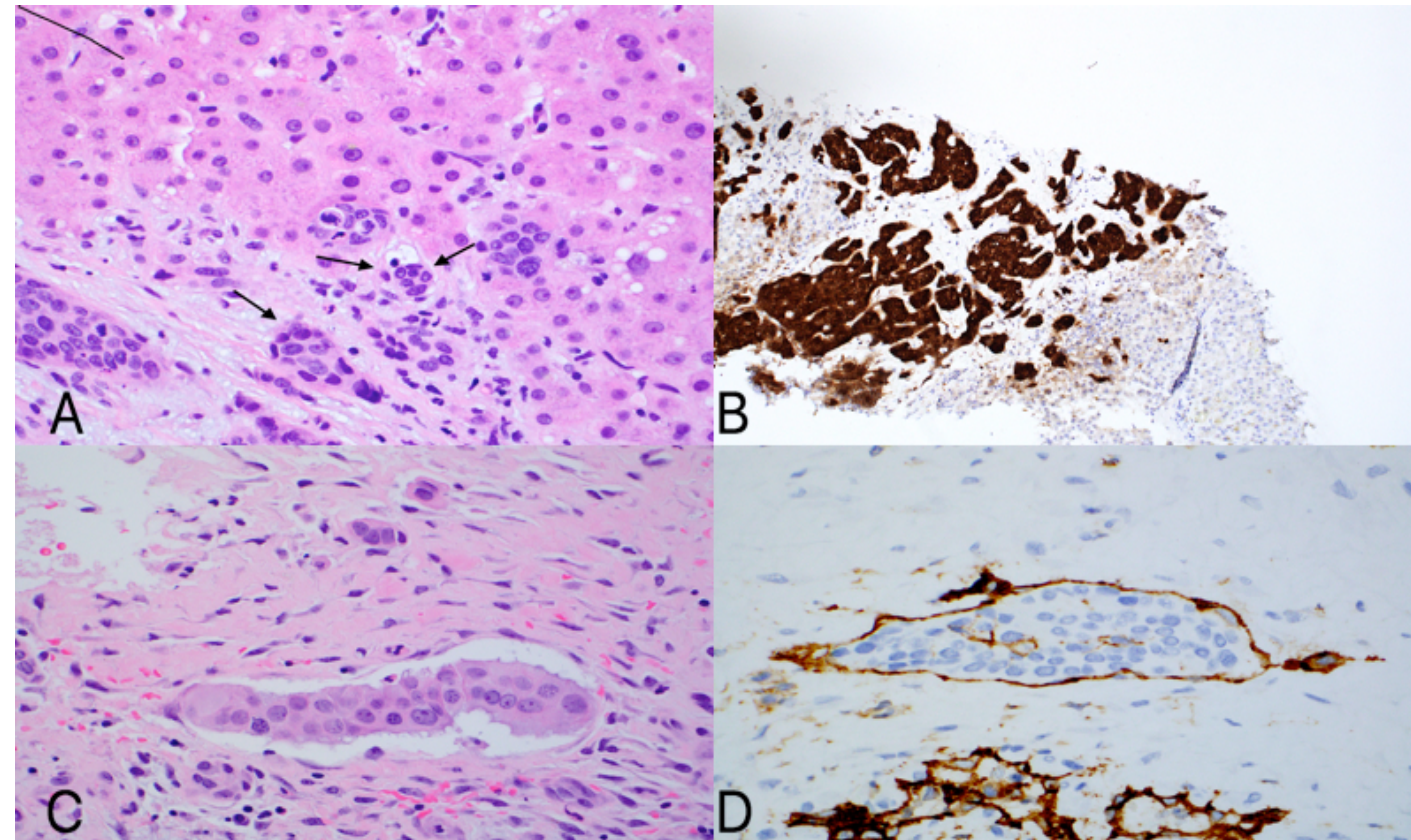


Figure A – Metastatic squamous cell carcinoma involving the sinusoidal and biliary spaces (40X)

Figure B – P16+ metastatic squamous cell carcinoma to the liver identical to the vaginal primary (10X)

Figure C – Vaginal biopsy with venous invasion of squamous cell carcinoma (40X)

Figure D – CD31 marking endothelial cells of vein with intraluminal squamous cell carcinoma (40X)

DISCUSSION

This is a rare case of infiltrative hepatic metastasis with features of portal hypertension due to biliary and sinusoidal involvement of metastatic vaginal SCC.

Sinusoidal infiltration of the liver by malignant cells is rare and can be seen in cases of lymphoma, breast adenocarcinoma and neuroendocrine tumors. Sinusoidal infiltration may lead to portal hypertension that mimics cirrhosis.

This case serves as an important reminder that not all cases of portal hypertension are from liver cirrhosis. When a thorough work up is unrevealing, malignant infiltration in the appropriate clinical setting should be considered.

Contact

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