



Metastatic Cervical Squamous Cell Carcinoma of The Distal Bile Duct



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Background:

Squamous cell carcinoma (SCC) of the bile duct is sporadic. Most cases are primary. Only two cases of cervical SCC metastatic to the bile ducts have been reported. Consideration of this diagnosis is essential in patients who have a history of malignancy and present with symptoms of biliary obstruction.

Case Presentation:

A 63-year-old female presented with persistent abdominal pain, nausea, and vomiting. Mild abdominal tenderness and scleral icterus were noted on physical examination. Bilirubin, AST, and ALT were elevated. Magnetic resonance cholangiopancreatography (MRCP) revealed dilated intra- and extra-hepatic bile ducts; however, there was no evidence of an apparent mass or gallstones. A lesion was observed at the ampullary level measuring around 1 cm that was brushed and biopsied on endoscopic cholangiopancreatography (ERCP). A metal stent was placed for decompression in the common bile duct. Pathology revealed poorly differentiated SCC with an immune profile favoring metastasis from the gynecologic tract. The patient was diagnosed with SCC of the cervix 15 months prior to presentation. A biopsy of the cervical tissue showed poorly differentiated cervical SCC with positivity in CK7 and HMWK, scattered positive staining of vimentin. Chemo-radiation was initiated with Cisplatin, Paclitaxel, and Bevacizumab.



Figure 1: Fluoroscopy image during ERCP showing a strict at the distal common bile duct.



Figure 2: Abnormal tissue noted at the ampullary level.

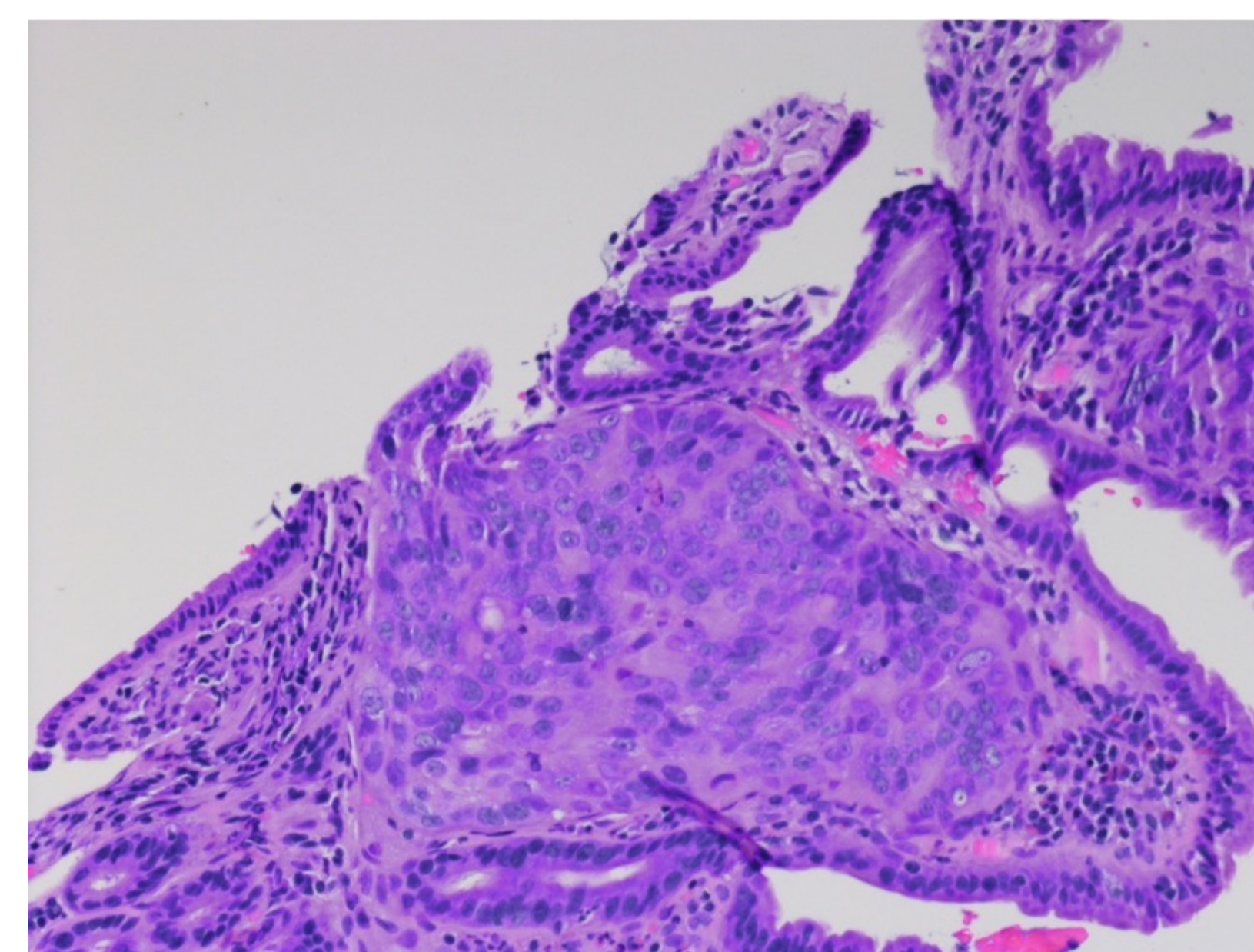


Figure 4: A 200x image shows the distal common bile duct biopsy. There are nests of malignant squamous cells deep to the ductal epithelium in the lamina propria, likely representing metastatic disease.

Case Presentation:

Next-generation sequencing (NGS) showed an immunohistochemical profile consistent with gynecological cancers, namely, MLH1, PMS2, MSH2, and MSH6. Pembrolizumab was also started due to positive PDL-1 expression and mutations in ATM and KMT2D. These agents were continued after she underwent the biliary decompression.

Discussion:

Metastatic SCC of the biliary tract is rare. Due to its low incidence, there is no standardized treatment strategy; however, there are reported cases of surgical resection in addition to chemoradiotherapy. Very few cases of cervical SCC have been reported to spread to gastrointestinal organs. NGS is a modality that has been widely implemented. The combination of immunohistology staining and NGS can aid in the diagnosis and help guide chemotherapy. The genetic variations present a valuable tool to aim the treatment of cervical cancer. While survival rates for patients with cervical carcinoma have improved, treatment remains difficult as not enough cases exist to compare treatment modalities. Limited knowledge is present regarding managing extrahepatic duct squamous cell carcinoma since it is rare.