

中文題目：攝護腺癌轉移至總膽管：少見之病例討論

英文題目：An unusual presentation of common bile duct metastasis from prostate cancer ; a case report

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Introduction:

The most common cause of malignant bile duct obstruction is pancreas origin, followed by cholangiocarcinoma. Others include ampullary, gallbladder, and metastatic cancer.

Metastatic non-hepato-pancreato-biliary cancer causing bile duct obstruction is rare,, and the bile duct obstruction is caused extrinsically by a lymph node, such as gastric, colon, breast, lung, renal cell carcinoma, melanoma, and hepatocellular cancer. Prostate cancer with bile duct metastasis is extremely rare. We reported a patient with prostate cancer with common bile duct metastasis, causing jaundice and recurrent cholangitis.

Case Presentation:

Metastatic prostate cancer can cause obstructive jaundice by either compression of common bile duct (CBD) or hepatic infiltration. It can also metastasize to the pancreas. We report a rare case of metastatic prostate cancer presenting as obstructive jaundice. A 67-year-old man with prostatic adenocarcinoma, Gleason 5+4, pT3bN0M0, status post RaRP+BPLND in 2016, and adjuvant radiotherapy and ADT, with progression to bone metastasis, after 12th biweekly Docetaxel therapy with partial remission. He visited the GI OPD in May of 2020, after experiencing abdominal fullness, poor appetite with significant body weight loss. Clinical examination revealed mildly icteric sclerae with tea-colored urine, without abdominal tenderness or clay stool passages. Abdominal CT revealed dilated CBD and bilateral IHDs. Laboratory analysis was consistent with an obstructive pattern of the liver enzymes: total bilirubin 2.2mg/dl; AST 185U/L, ALT 293U/L. MRCP later showed obstructive jaundice with bile duct stenosis over lower CBD without obvious mass, favor metastatic tumor. ERCP with stent placement was conducted, with long stricture of distal CBD, 3 cm in length, and transpapillary biopsy of CBD revealed metastatic prostate adenocarcinoma. The tumor cells were diffusely positive for NKX3.1, although negative for PSA. Combined with clinical information, the picture was consistent with metastatic prostate adenocarcinoma. Several attempts of biliary stent replacements were performed, with abdominal CT later revealed bilateral pleural effusion with

suspected RML metastasis, which was later confirmed on chest CT. Cytology of pleural effusions also reported malignant cells, with metastatic adenocarcinoma of prostate in origin favored after immunostaining. In the late stage of prostate cancer, the patient and family had opted for hospice care, and treatments of metastatic prostate cancer were discontinued.

Discussion:

Malignant distal biliary obstruction is a challenging condition and difficult for both diagnosis and treatment. CT scan and/or MRI are the two main imaging techniques for the initial approach. The second step will focus on tissue acquisition to confirm the diagnosis: EUS-FNA if a mass is identified, ERCP with biliary brushing and trans-papillary biopsys if no mass is not identified. In our case, there were no obvious mass lesions noted in cross sectional imaging. The tissue for pathology diagnosis is obtained from ERCP with transpapillary biopsy. The most common site for metastatic prostate cancer most commonly are bones (84%), distant lymph nodes (10.6%), liver (10.2%), and lung (9.1%). Literature review suggested that less than 2% of prostate cancer metastasize to the pancreas. There were no reports for prostate cancer with bile duct metastasis. This is the first case report for metastatic prostate cancer with bile duct involvement. The immunohistochemistry stain can be helpful to differentiate primary from secondary adenocarcinoma of bile duct or pancreas. Prostate-specific antigen (PSA) is a well known marker for prostate cancer, but it may be expressed in low level or not at all in poorly differentiated primary or metastatic prostate adenocarcinoma. NKX3.1 is a prostatic tumor suppressor gene, and staining for the NKX3.1 protein is highly specific (99.7%) and sensitive (98.6%) for prostatic adenocarcinoma. In our case, we combined PSA, and CK7 for definitive diagnosis of the bile duct malignancy from prostate cancer. Treatment should be directed for the placement of an internalized biliary stent along with chemotherapy. Endoscopy has a crucial role in palliation and to relieve biliary obstruction. Plastic stents and self-expandable metal stents (SEMS) are considered for bile duct drainage. The SEMS has better efficacy and longer patency for bile duct drainage. EUS-guided drainage is an alternative when encounter bile duct cannulation failure.

Conclusions:

Metastatic cancer of the prostate, presenting with carcinomatous obstruction of the common bile duct as a cause of jaundice and abnormal liver function tests is extremely

rare. Metastatic prostate cancer should be considered in the differential diagnosis among the elderly presenting with obstructive jaundice.

