A rare consequence of cholelithiasis is Mirizzi Syndrome, which is the obstruction of the common hepatic duct (CHD) secondary to cystic duct stone impaction. We report a case of metastatic cholangiocarcinoma in which imaging findings mimicked Mirizzi Syndrome.

An 83-year-old female with a history of gallstones presented with nonspecific abdominal pain worsened by eating and an unintentional 15-pound weight loss. Abdominal CT revealed a markedly distended gallbladder and intrahepatic biliary ductal dilation but without a detectable stone in the cystic duct. ERCP showed a smooth, wedge-shaped filling defect in the CHD. MRCP indicated a change in caliber at the junction of the right hepatic lobe ducts and the common bile duct along with ill-defined enhancement. Cholangiographic findings suggested the presence of a mass, but brush cytology and biopsy of the ductal stricture were both negative for malignancy. However, tumor markers CEA and CA 19-9 were markedly elevated. Gastrointestinal cancer was strongly suspected despite negative pathology findings. Given the patient’s advanced age, palliative endoscopic biliary stenting and laparoscopic cholecystectomy was recommended. Laparoscopy revealed a tumor of the gallbladder with diffuse peritoneal carcinomatosis. Pathology of biopsied tumors indicated metastatic cholangiocarcinoma. The patient was transitioned to palliative care.

The present case demonstrates that metastatic cholangiocarcinoma can radiographically mimic Mirizzi Syndrome. Pseudo-Mirizzi syndrome has previously been reported in cases of cholecystitis, gallbladder cancer, lymphadenopathy, and bile pseudocyst. Cancer is therefore one of a number of etiologies that should be considered when radiologic findings indicate Mirizzi syndrome.