

## Extrahepatic biliary obstruction due to bile duct metastasis from primary esophageal squamous cell carcinoma: a rare cause of jaundice

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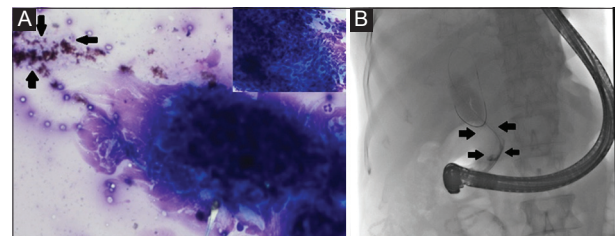
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A 45-year-old female presented with cholestatic jaundice of 3 weeks' duration. She had been treated 16 months previously for locally advanced squamous carcinoma of the lower esophagus, with local radiation and systemic chemotherapy (cisplatin and 5-fluorouracil), resulting in complete resolution of dysphagia as well as the tumor on endoscopy. Her liver function tests revealed serum bilirubin of 14.6 mg/dL (conjugated: 10.2 g/dL). Computed tomography revealed dilation of the central biliary radicles and upper common bile duct (CBD) (Fig. 1A; arrows). Endoscopic ultrasound (EUS) revealed a large mass lesion with heterogeneous echotexture filling the lumen of the lower CBD (Fig. 2; arrows) and enlarged celiac as well as mediastinal lymph nodes. EUS-guided fine-needle aspiration of the bile duct lesion (Fig. 1B; right) and enlarged lymph nodes was performed. The smears from the CBD lesion showed clusters of tumor cells with moderate nuclear pleomorphism and hyperchromatic nuclei with surrounding bile pigment (Fig. 2A; arrows). The tumor cells had a moderate to abundant amount of densely basophilic cytoplasm, indicating squamous differentiation (Fig. 2A; inset). Similar cells were also seen on smears from both celiac and mediastinal lymph nodes, suggesting a disseminated spread of esophageal cancer. Endoscopic retrograde cholangiopancreatography revealed a large filling defect in the lower CBD (Fig. 2B; arrows) due to polypoidal metastasis from the esophageal squamous cell cancer. A 10-Fr plastic stent was placed for palliation of cholestatic jaundice. The cholestatic symptoms resolved and patient was referred to oncology services.

We have reported an unusual case of extrahepatic biliary obstruction caused by bile duct metastasis from primary esophageal squamous cell carcinoma. Adenocarcinoma is the most common malignancy of the biliary tract, whereas



**Figure 1** (A) Computed tomography: dilated central biliary radicles and upper common bile duct (arrows). (B) Endoscopic ultrasound: large mass lesion with heterogeneous echotexture, filling the lumen of the lower common bile duct (arrows). EUS guided fine needle aspiration being done



**Figure 2** (A) Smears from the common bile duct lesion showed clusters of tumor cells with moderate nuclear pleomorphism and hyperchromatic nuclei with surrounding bile pigment (arrows). The tumor cells had a moderate to abundant amount of densely basophilic cytoplasm, indicating squamous differentiation (inset). (B) Endoscopic retrograde cholangiopancreatography: large filling defect in the lower common bile duct (arrows) due to polypoidal metastasis from esophageal squamous cell cancer

squamous cell carcinoma is very rare [1]. Most of the reported cases of squamous cell carcinoma of the bile duct are primary bile duct cancers, while squamous cell cancer very rarely metastasizes to the common bile duct [2,3].

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