

Abstract #P086

Hepato-Bronchial Fistula; a rare complication of Liver Abscess

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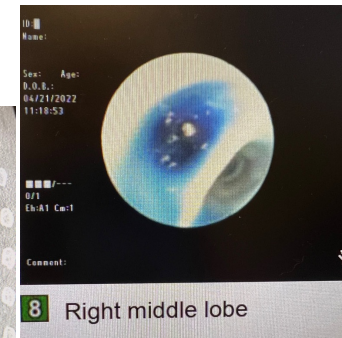
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• Background:

Acquired Hepato-Bronchial Fistula (HBF) is rare communication between Hepatic parenchyma and bronchial tree via diaphragm. It's a rare entity and less than 70 cases are described in literature¹. Unlike congenital causes, Acquired types are caused by hydatid or amebic disease of the liver, hepatic abscess, trauma, and neoplasm. Given its rarity they can be difficult to diagnose, manage and often associated with high morbidity and mortality.

Case report:

We present a 45 yo male with pancreatic neuroendocrine tumor, chronic pancreatitis and biliary obstruction s/p drainage, gastrojejunostomy. After initial diagnosis, he presented with Pyogenic liver abscesses complicated by diaphragmatic rupture and empyema requiring VATS with decortication. Later in course, patient was found to have recurrent liver abscess, beneath diaphragm resulting in septic shock. Patient had 3 drains placed for abscess. He was found to have pneumobilia on one of the follow-up imaging. A contrast study was suspicious for fistula formation between airway and drain. bronchoscopy was performed to establish the diagnosis. A 5 mL of methylene blue was injected through a hepatic drain. A visualization of dye was instantaneously seen in third generation airway of right middle lobe with direct visualization. Subsequently hepatic drain was removed and recommendation was made for fistula to be healed. Patient continued on empiric antibiotic, and did relatively well without intervention.



• Conclusion:

- HBF is a rare entity. Historically surgical drainage and repair have been used with little success and significant morbidity³. However this case already had drains placed and his source was controlled at the time of discovery of fistula. More importantly adequate antibiotics with definitive management biliary tract is essential⁴. CT scan, USG and MRI or direct visualization with dye injection can all be helpful and support diagnosis⁵. Careful assessment of this condition is needed if clinical suspicion is high, before therapeutic procedure⁶.
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1.Liao, Guan-Qun et al. "Management of acquired bronchobiliary fistula: A systematic literature review of 68 cases published in 30 years." *World journal of gastroenterology* vol. 17,33 (2011): 3842-9. doi:10.3748/wjg.v17.i33.3842.2.Peacock TB. Case in Which Hydatids Were Expecterated, One of Suppuration in a Hydatid Cyst of the Liver Communicating with the Lungs. *Edinb Med Surg J.* 1850;74(184):33-46.3.Das SK, Nath T, Jana CK, Kundu AK. A rare case of green color sputum: A case of hepatobronchial fistula. *Ann Trop Med Public Health* 2012;5:618-9. 4. M.A. Corral Sánchez, R. Gómez Sanz, A. Alvarado Astudillo, P. Rico Selas, E. Moreno González. A rare complication of lithiasic cholecystitis. *Chest*, 106 (1994), pp. 1303-1304. 5.M. Gulamhussein, D. Patrini, J. Pararajasingham, B. Adams, R. Shukla, D. Velissaris, et al. Hepatopulmonary fistula: a life threatening complication of hydatid disease.*J Cardiothorac Surg*, 10 (2015), pp. 103 6. Baudet JS, Medina A, Moreno A, Navazo L, Avilés J, Soriano A. Bronchobiliary fistula secondary to ruptured hepatocellular carcinoma into the bile duct. *J Hepatol.* 2004;41:1066-1067.

