Isolated Left sided hydrothorax in a newly diagnosed Hepatocellular carcinoma - A case report

Absract:
Usually hepatic hydrothorax is a common presentation noticed with Hepatocellular carcinoma but we present a case report with left sided hydrothorax which is a rare association with Hepatocellular carcinoma.

Keywords
Hepatocellular carcinoma, left hydrothorax, incidental finding, rare presentation

Introduction

Hepatocellular carcinoma (HCC) is a primary malignancy of the liver, that occurs predominantly in patients with underlying chronic liver disease and cirrhosis mainly caused by hepatitis B and C.. However, up to 25% of patients have no history of cirrhosis or risk factors for it. (1)
Hydrothorax is a type of pleural effusion in which transudate accumulates in the pleural cavity. This condition is most likely to develop secondary to congestive heart failure, following an increase in hydrostatic pressure within the lungs. More rarely, hydrothorax can develop in 10% of patients with ascites which is called hepatic hydrothorax. (2)
There's an association of Hepato-hydrothorax with HCC secondary to its anatomical position and pathology. But an isolated left sided hydrothorax with HCC is a rare presentation.

Case Report

73 years old female, known case of HCV (untreated) presented with the complaints of decreased oral intake, generalised weakness and undocumented weight loss from fifteen days. Upon arrival she was vitally and hemodynamically stable. On examination her liver was palpable with the span of 19cm, firm, irregular borders, no bruit with no other visceromegaly.
Her baseline and relevant Investigations were sent. Chest xray reported isolated Left sided pleural effusion – for which diagnostic and therapeutic pleural tap was done.
Ultrasound abdomen was done which reported a lesion in right lobe of liver - suspicion of Hepatocellular carcinoma along with moderate ascites.
Pleural tap was done - 500ml effusion was drained; as per light's criteria the effusion was transudative in nature.
She was Child pugh's class B. Her tumor marker alpha feto protein was significantly raised > 6000.
HRCT confirmed the status of Hepatocellular carcinoma.

Discussion

Hepatic hydrothorax is primarily a pleural effusion that appears in a patient presenting commonly with cirrhosis and portal hypertension(5,6). Though the exact mechanism of hepatic hydrothorax is unknown, it is likely understood to be an outcome of raised abdominal and negative pressure which causes diaphragmatic rupture and creates an unmediated route of ascitic fluid into the pleural cavity. Hepatic hydrothorax is commonly associated with HCC which is one of the typical forms of liver cancer. (3,4)

There has been clear evidence and literature on HCC as a cause for right-sided hydrothorax but hardly any on the left-sided except a few in which one study from the USA appears to include patients suffering from hepatic hydrothorax due to cirrhosis. 77% of the patients had right-sided effusion while only 17% had left-sided effusion.[1]
We are demonstrating one such rare case of a patient who has HCC associated with left-sided pleural effusion. A 73 years old female patient with untreated HCV complains of weight loss, reduced appetite, and generalized weakness for the past 15 days.
One other study from Japan shows liver cirrhosis and HCC diagnosed from left-sided pleural effusion which was not clearly explained due to previously described cases having been reported as laterality of the right side.[2]

Conclusion
It is must to keep in mind that even an isolated left sided hydrothorax can present with Hepatocellular carcinoma.In such a presentation rule out all possible causes of left hydrothorax.

References:

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Figure 1 : Chest X-Ray