Cannonball Pulmonary Metastases in Gallbladder Cancer

Sir,

A 25-year-old woman, nondiabetic and normotensive, presented with deep jaundice, weakness, and fatigue for the last 1 month. She had been asymptomatic before this. She gave a history of pruritus that had rapidly progressed over the last 1 month. Over the last 10 days, she had developed dry cough and dyspnea. She had no history of fever, hemoptysis, or pain abdomen.

Physical examination revealed mild pallor and severe jaundice. No lymph nodes were palpable, but chest examination revealed bilateral diffuse crepitations.

Routine blood tests revealed hemoglobin 7.8 g/dL, bilirubin 10.7 g/dL (direct: 8.2 g/dL, indirect fraction: 2.5 g/dL), aspartate aminotransferase - 68 U/L, alanine aminotransferase - 70 U/L, and alkaline phosphatase - 780 U/L. Viral serology for hepatitis A, B, C, and E was negative.

An ultrasound of the abdomen revealed dilated intrahepatic biliary radicals and dilated proximal common bile duct with choledocholithiasis. A diagnosis of obstructive jaundice was made. However, a routine chest X-ray – posteroanterior and lateral views – revealed multiple pulmonary nodules throughout both lung fields, which were highly suggestive of secondaries [Figures 1 and 2]. A contrast-enhanced computed tomography (CECT) of the abdomen was sought, which revealed a gallbladder neck mass infiltrating biliary tree at porta with proximal biliary dilatation and liver metastases [Figure 3]. A CECT of the chest revealed multiple bilateral "cannonball" pulmonary metastases. A diagnosis of gallbladder cancer with distant metastases was made. However, the patient declined further treatment and chose hospice and palliative care at home [Figure 4].

Multiple lung nodules are classically seen with hematogenous dissemination of malignant tumors in the lungs when they are known as cannonball secondaries.[1] Infections, immunological diseases, and arteriovenous malformations have also been reported to cause pulmonary nodules.[2] In general, development of lung metastases implies poor prognosis though rare reports of favorable prognosis are also available.[3] Cavitary pulmonary metastases in a case of gallbladder cancer have been rarely reported in literature.[4] This case highlights an uncommon presentation of gallbladder cancer where the chest radiograph led to diagnosis while the abdominal ultrasonography was unrevealing. This also reiterates the role of a simple chest X-ray in diagnosis of underlying serious diseases.

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Nil.

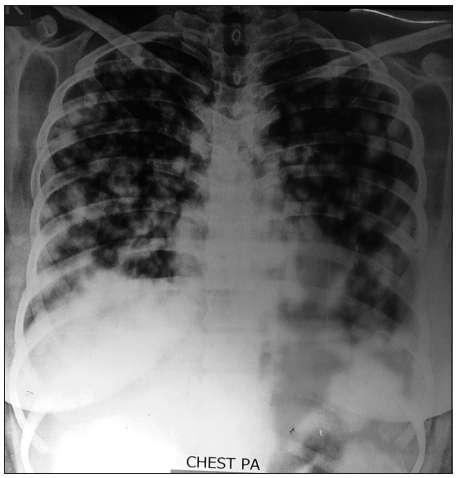

Figure 1: Chest X-ray showing multiple pulmonary nodules

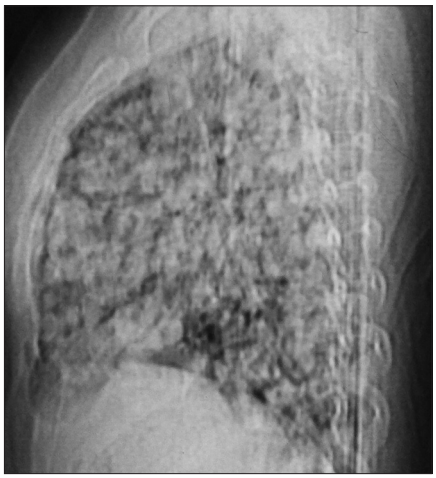

Figure 2: Chest X-ray (lateral view) showing multiple pulmonary nodules

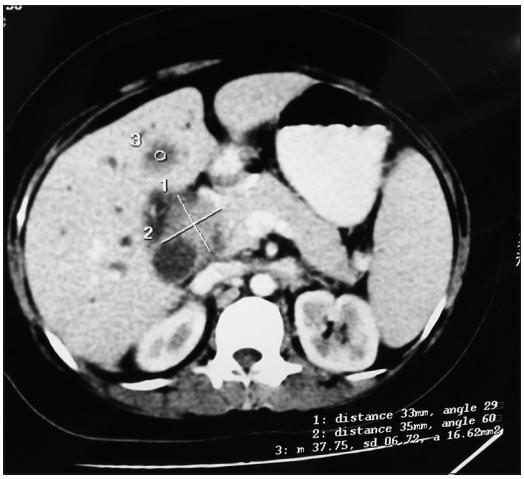

Figure 3: Contrast-enhanced computed tomography of the abdomen showing gallbladder neck mass infiltrating biliary tree at porta with proximal biliary dilatation and liver metastases

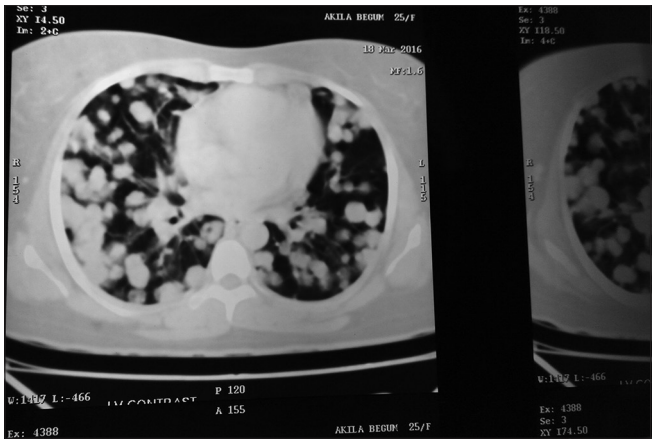

Figure 4: Contrast-enhanced computed tomography chest showing multiple bilateral "cannonball" pulmonary

Conflicts of interest

There are no conflicts of interest.

Rakesh Agarwal, Rashmi Baid[1]

From the Departments of Cardiology and [1]Obstetrics and Gynaecology, IPGME and R and SSKM Hospital, Kolkata, West Bengal, India

Address for correspondence:
Dr. Rakesh Agarwal, 243, G.T Road(N), Laxmi Niketan, Flat-2E, Liluah, Resident in Cardiology (DM PDT), IPGME&R and SSKM Hospital, Howrah - 711 204, Kolkata.
E-mail: dr.agarwal.rakesh@hotmail.com

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