International Journal of Advances in Medicine
Patil A et al. Int J Adv Med. 2019 Jun;6(3):987-988
http://www.ijmedicine.com
pISSN 2349-3925 | eISSN 2349-3933
DOI: http://dx.doi.org/10.18203/2349-3933.ijam20192277

Letter to the Editor

The vanishing phantoms

Sir,

A50-year-old known diabetic female presented to us with gradually progressive dyspnea and swelling over both lower limbs since 15 days. She was a known case of ischemic heart disease since 3 years on medical management. On examination she was afebrile, heart rate was 128 beats/min, BP-98/52mm of Hg, JVP was raised at 11 cm of water. The respiratory rate was 30/min. Oxygen saturation was 92% while breathing in ambient air. Air entry was decreased on right inter and infra scapular areas with bi basal late inspiratory crepitations.

ECG revealed QS complexes in anterior leads. Echocardiogram revealed of ejection fraction of 30% with global left ventricular hypokinesia suggestive of Ischemic cardiomyopathy with heart failure. Coronary angiogram revealed triple vessel disease and patient was advised CABG.

CXR showed 2 massive sharply demarked round/oval homogeneous dense shadows in size in the right lower lobe (Figure 1). HRCT thorax revealed interconnected hypodense collection in the oblique and horizontal fissure on right side. It had 2 loculations, largest one measuring approximately 6.5 x 4cm, 4.5 x 2.7cm, suggesting multiple phantom tumors (Figure 2 and Figure 3).

Figure 1: CXR showing 2 massive sharply demarked round/oval homogeneous dense shadows in size in the right lower lobe.

Figure 2: HRCT thorax showing interconnected hypodense collections in the oblique and horizontal fissure on right side.

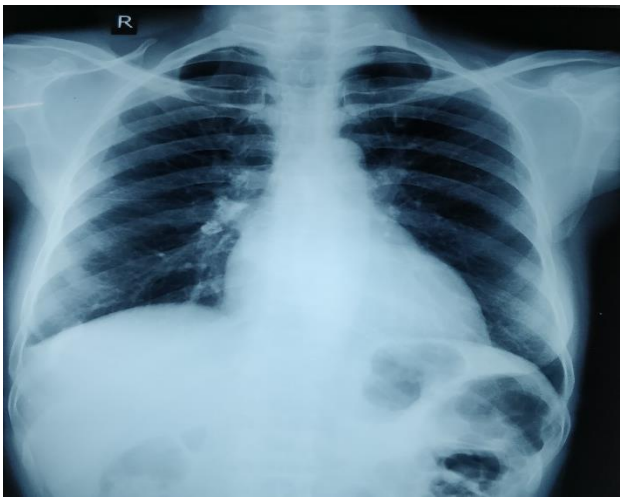

Figure 3: CXR showing clearing of the phantoms.

The patient refused to undergo CABG and was treated with diuretics, ACE inhibitors, anti platelets optimally up to the tolerance level. After 15 days patients symptoms were significantly improved. On examination, 15 days later, CXR revealed complete resolution of the observed round/oval tumor-like images.

DISCUSSION

In 1928, Stewart was the first one to report this entity as "interlobar hydrothorax.[1] Localized interlobar effusions i.e. phantom tumor/s in congestive heart failure are uncommon but, well-known entities.[2-4] Incidence is

difficult to estimate, due to the lesser number of reported cases. These are localized transudative interlobar pleural fluid collection in congestive heart failure. The name is phantom or vanishing due to its feature resemblance to a tumor on the Chest X-Ray and from its tendency to vanish after appropriate management of congestive cardiac failure.

Phantom or vanishing tumor generally occur in the right hemithorax, with three-quarters of the reported cases within the right transverse fissure and less frequently within the oblique fissure. Simultaneous occurrence in both fissures were also reported in about one-fifth of cases while in the left hemithorax is involved sporadically, with predominance in males.[5] In this case chest x-ray and HRCT thorax suggested classical features of Phantom tumour.

A key role in their pathogenesis is assumed to be due to adhesions and obliteration of the pleural space around the edge of the fissure due to pleuritis. In such setting, phantom tumors arise whenever the transudation from the pulmonary vascular space exceeds resorptive ability of the pleural lymphatics. However, this atypical intrafissural distribution of pleural effusions can also be explained by local increase in elastic recoil by adjacent, partially atelectatic lung that yields a "suction cup" effect and favors loculation of liquid even in the absence of pleural adhesions.[5,6]

The right-sided predilection of phantom tumor is best explained by the greater hydrostatic pressure that existing on this right side in comparison with left in congestive heart failure which results in impaired venous and lymphatic drainage causing loculation of fluid.[7]

The differential diagnosis of loculated pleural effusions within the fissure includes the following: transudates due to the left ventricular failure or renal failure, exudates (parapneumonic pleural effusions, malignant pleural effusions, and benign asbestos-related pleural effusions), and hemothorax, chylothorax, and fibrous tumors originating from the visceral pleura of the interlobar fissure.[8]

CONCLUSION

The possibility of phantom lung tumor should be considered and excluded in any patient presenting with congestive heart failure and an apparent lung mass on a CXR. It might be the part of congestive cardiac failure.

Aniket Patil, Siddhanth Jain, Sourya Acharya*, Sakshi Gagneja

Department of Medicine, JN Medical College, DMIMSU, Wardha, Maharashtra, India

***Correspondence to**
Dr. Sourya Acharya,
Email: souryaacharya74@gmail.com

REFERENCES

1. Bedfordand DE, Lovibond JL. Hydrothorax in heart failure. British Heart J. 1941;3(2):93-111.
2. Gefter W, Boucot K, Marshall E. Localized interlobar effusion in congestive heart failure vanishing tumor of the lung. Circulation. 1950;11:336-43.
3. Millard CE. Vanishing or phantom tumor of the lung; localized lnterlobar effusion in congestive heart failure. Chest. 1971;59(6):675-7.
4. Oliveira E, Manuel P, Alexandre J, Girao F. Phantom tumour of the lung. Lancet. 2012;380(9858):2028.
5. Buch KP, Morehead RS. Multiple left-sided vanishing tumors. Chest. 2000;118(5):1486-9.
6. Fleischner FG. Atypical arrangement of free pleural effusion. Radiologic Clinics of North America. 1963;1:347-62.
7. Rabinowitz JG Kongtawng T. Loculated interlobar air-fluid collection in congestive heart failure. Chest. 1978;74(6):681-3.
8. Haus BM, Stark P, Shofer SL, Kuschner WG. Massive pulmonary pseudotumor. Chest. 2003;124(2):758-60.

Cite this article as: Patil A, Jain S, Acharya S, Gagneja S. The vanishing phantoms. Int J Adv Med 2019;6:987-8.