Sir,

A hyperlucent lung is one that has increased lucency compared to the other lung on the chest radiograph or CT. In our routine practice, we usually come across patients with unilateral hyperlucency on chest X-ray. Before investigating the cause of hyperlucency, it is important to establish whether the apparent unilateral hyperlucent hemithorax is truly too lucent (hypoattenuating) or if the contralateral hemithorax is too opaque (hyperattenuating).\textsuperscript{[1]} This appearance can result from a wide variety of technical deficiencies/factors and various diseases as enumerated and discussed in various articles.\textsuperscript{[2,3]} The various causes of unilateral hyperlucency can be divided as:

- Technical causes
- Causes related to chest wall
- Pulmonary vascularity abnormality
- Lung parenchymal abnormality
- Central airway abnormality
- Mediastinal and pleural space abnormalities.

Although, the above list encompasses almost all the causes responsible for this abnormality,

We, present two cases with a totally unrelated cause.

**Case 1**
A 57-year-old male presented with complaints of productive cough and body aches for the last 10-15 days. There were no other relevant complaints or history. On examination the patient had an amputated left arm above the elbow attributed to an accident 41 years ago. The general physical examination of the patient was unrevealing and examination of the chest was essentially normal. X-ray of the chest [Figure 1] showed hyperlucency of left hemithorax. Spirometry of the patient was within normal limits. Contrast-enhanced computed tomograph (CECT) of the chest showed an unremarkable lung fields and vasculature. Further evaluation of the CECT revealed that the chest wall muscles of the left hemithorax were less developed/atrophied as compared to right hemithorax [Figure 2].

**Case 2**
A 59-year-old male presented with complaints of cough and sore throat for the past 10 days. There were no other relevant complaints. The patient had an amputated right arm above elbow since 30 years. Examination of the chest was essentially normal. His X-ray chest PA view showed a hyperlucent right hemithorax [Figure 3]. His CECT chest revealed a normal parenchyma and vasculature with muscles of the right side to be less developed as compared to the other side [Figure 4].
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Urvinderpal Singh, Sunil Kumar, Vidhu Mittal
Department of Pulmonary Medicine, Government Medical College, Patiala, Punjab, India
E-mail: singhurinderpal@hotmail.com

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Figure 4: CECT chest showing atrophied muscle mass on the right side (arrows)

Other than the diminished muscle mass on the respective hemithoraces due to disuse atrophy, we could not find any cause of hyperlucency on X-ray chest of both the patients.

Chest wall abnormalities can be seen as a result of radical mastectomy, scoliosis, some professions (e.g., butchers, carpenters) which give rise to asymmetric chest wall musculature, atrophy of the trapezius muscle after radical neck dissection and rarely defect of the pectoralis muscle (Poland anomaly).4

Despite our best efforts, we could not lay our hands on any similar case as a cause of unilateral hyperlucency of the lung in medical literature. Therefore, along with technical factors, chest wall abnormalities and other congenital and acquired conditions, disuse atrophy of the hemithorax muscles should also be considered as a cause while evaluating an X-ray chest with unilateral hyperlucency.

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