Hypoplasia of the left pulmonary artery

A 52 year-old female who was a non-smoker, was referred with a 3 year history of dyspnoea on exertion (MMRC II/IV). Lung auscultation revealed diffuse reduction of the respiratory sounds in the left hemithorax. Pulmonary function tests showed a restrictive pattern and hypoxaemia on exertion.

High resolution computed tomography (HRCT) of the chest revealed hypoplasia of the left lung with bronchiectasis, and a marked decrease in the diameter of the main branch of the left pulmonary artery. The chest HRCT also confirmed the shift to the left of the mediastinal structures (Figure 1). On ventilation/perfusion lung scan the right lung was depicted normally, while the left lung was poorly visualized (Figure 2), in contrast to the unilateral left pulmonary artery agenesis.

FIGURE 1. High resolution computed tomography of the chest in a 52 year-old female with dyspnoea.

FIGURE 2. Ventilation/perfusion lung scan in a 52 year-old female with dyspnoea.

REFERENCES