Lung herniation: an unusual cause

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A 52-year old woman presented with left parasternal swelling, more prominent on coughing (Video 1 and Fig. 1E and F). She had undergone anterior mediastinotomy 4 years earlier. Chest computed tomography (Fig. 1A–C) showed lung herniation through a chest wall defect (Fig. 1D). It was repaired surgically using an acellular collagen matrix prosthesis. Lung herniation is a rare complication of anterior mediastinotomy.

Video 1: Video showing left parasternal swelling becoming more prominent during coughing.
Figure 1: (A) Chest computed tomography axial view showing anterior hernia of the left lung (white arrow); (B) chest CT volume rendering evidence of lung hernia of the left upper lobe (white arrow); (C) chest CT sagittal view showing lung hernia (white arrow); (D) chest CT volume rendering demonstration of chest wall defect determined by mediastinotomy anterior (black arrow); (E) paradoxical movement upon inspiration at the defect level (black arrow); (F) left parasternal swelling, becoming more prominent during the Valsalva manoeuvre (black arrow).