Lung hernia following minithoracotomy for epicardial lead placement

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DESCRIPTION

A 68-year-old gentleman was referred to the thoracic outpatient clinic 6 months after minithoracotomy and repositioning of an epicardial lead for his cardiac resynchronisation therapy-pacemaker to improve synchrony in dilated cardiomyopathy. His significant medical history also included chronic obstructive pulmonary disease, hypertension, chronic kidney disease stage 3 and depression. His original procedure was uncomplicated, but within 1 month he noticed a large (15×15 cm) lump that extended from his axilla down to his left chest wall. It was uncomfortable and had to be manually reduced. He suffered from increased shortness of breath and it compromised his ability to cough. A CT chest scan was performed and revealed an obvious lung hernia (figure 1). His symptoms

warranted a thoracotomy to reduce the hernia electively.

At operation a large neck at the level of the previous thoracotomy was found (figure 2). The adhesions were taken down and the neck was released. The previous thoracotomy defect was closed with a figure of eight non-absorbable ethibond suture; the sac was closed simply with polydioxone. The patient's recovery postoperatively was uneventful.

Figure 1 CT chest: evidence of lung hernia.

Figure 2 Intraoperative pictures: (A) hernia sac, (B) neck of defect and (C) left lung.

Learning points

- ▶ Lung hernias are rare and may be congenital or acquired. Acquired hernias may be spontaneous or secondary to trauma or surgery such as video-assisted thoracotomy or open thoracotomy. Patients often present with a history of cough.¹
- ▶ The development of enhanced operative techniques in cardiac and thoracic surgery allows a larger and more diverse cohort of patients undergoing procedures. It is likely, therefore, that the incidence of lung hernias will increase and it is therefore important for clinicians to be aware of its diagnosis and surgeons to be mindful of its prevention by careful closure of thoracotomy wounds.²
- ▶ Patients particularly at risk are those with raised intrathoracic pressures, chronic obstructive pulmonary disease, obesity, diabetes or malnourished patients. However it is not that chest wall defects alone are sufficient to cause lung hernias.²

Competing interests None.

Patient consent Obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

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