Lung hernia after video-assisted thoracoscopic lobectomy clearly visualized by three-dimensional computed tomography

Hironori Ishibashi*, Masahide Hirose, Shin-ichiro Ohta

Department of General Thoracic Surgery, Shizuoka General Hospital, 4-27-1, Kita-andou, Shizuoka City, Shizuoka Prefecture 420-8527, Japan

Received 6 November 2006; received in revised form 21 December 2006; accepted 15 January 2007; Available online 6 March 2007

Keywords: Lung hernia; Video-assisted thoracoscopic surgery (VATS); Three-dimensional computed tomography (3D-CT)

Three-dimensional computed tomography (3D-CT) scans of 74-year-old man after VATS lobectomy for right middle lobe cancer clearly revealed lung hernia on post-operative day 5 (Figs. 1 and 2). Lung hernia visualized clearly by 3D-CT imaging is extremely rare and thoracic surgeons must be aware of this rare complication in VATS lobectomy.

Fig. 1. Computed tomography clearly demonstrated lung hernia of the right lower lobe through a chest wall defect at the site of a previous thoracoscopic surgery. At the previous thoracoscopic surgery, intercostal incision was closed with two interrupted sutures passing over the rib above the incision and through the rib below the incision, and three horizontal mattress interrupted sutures traversing the intercostal muscles above and below the incision.

Fig. 2. 3D-CT more clearly demonstrated lung hernia of the right lower lobe. After the herniated lung was returned to the thoracic cavity without ischemic change, closure of the intercostal incision was achieved with five interrupted sutures passing over the rib above the incision and through the intercostal muscles below the incision.

* Corresponding author. Tel.: +81 22 717 8521; fax: +81 22 717 8526.
E-mail address: hishiba@kf6.so-net.ne.jp (H. Ishibashi).

1010-7940/$ – see front matter © 2007 European Association for Cardio-Thoracic Surgery. Published by Elsevier B.V. All rights reserved.
doi:10.1016/j.ejcts.2007.01.041