Fibrin sheath following pleurodesis

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DESCRIPTION

A 63-year-old man was admitted to our hospital with drug-induced interstitial pneumonia. He was treated with corticosteroid and showed a partial decrease in the interstitial shadow. However, secondary pneumothorax was detected on day 28 of the treatment (figure 1A), thoracic drainage catheter was inserted. Although pleurodesis using autologous blood was performed twice, air leakage could not be improved. Therefore, pleurodesis using a 50% glucose solution was performed again, which resolved the pneumothorax with spontaneous tube extraction. Chest CT after spontaneous tube extraction showed an intrathoracic passage route of drainage tube with a fibrin sheath (figure 1B–D). A fibrin sheath is often described as a complication of central venous catheterisation and associated with venous occlusion.¹ In the present case, we speculate that pleurodesis using autologous blood could have been the cause of the intrathoracic fibrin sheath.

Learning points

- ▶ The intrathoracic fibrin sheath might occur secondary to the pleurodesis using autologous blood.
- ▶ Clinicians should be aware of this complication because pleurodesis using autologous peripheral blood or 50% glucose solution is an alternative treatment which had considerable effect and less adverse event compared with the standard method using talc etc, in case of pneumothorax secondary to drug-induced interstitial pneumonia.

Contributors HY was involved in patient's follow-up. HY, TY and NT contributed in the literature search and writing of the manuscript. NO participated in the figure making of CT scan images.

Figure 1 (A) Chest CT revealing pneumothorax in the left thorax, interstitial pneumonia in the right lower lobe and multiple bulla in the left upper lobe. (B–D) Chest CT after spontaneous tube extraction revealing an intrathoracic passage route of drainage tube with a fibrin sheath (arrow head).

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REFERENCE

- 1 Krausz DJ, Fisher JS, Rosen G, *et al*. Retained fibrin sheaths: chest computed tomography findings and clinical associations. *J Thorac Imaging* 2013. [Epub ahead of print].

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