There is a hole in the lung!

Rizzardi Giovanna, Bertolaccini Luca, Terzi Alberto

Thoracic Surgery Unit, S. Croce Hospital, Cuneo, Italy

ABSTRACT

Key Words:

Authors show a particular image of a "hole in the lung" caused by the previous chest drainage. It can be important for differential diagnosis and to underline the role of knowledge of the patient's history and imaging. chest X-ray; differential diagnosis pulmonary abscess, chest drainage.

J Thorac Dis 2010; 2: 253-253. DOI: 10.3978/j.issn.2072-1439.2010.02.04.6

A 38-year-old woman was transferred from another hospital to our thoracic surgery unit for a right empyema. She presented from 10 days fever, asthenia, right thoracic pain and increase of white globes (15.600/uL). The Chest X-ray and thoracic CT scan (Fig 1) showed a parapneumonic pleural effusion. She underwent a right video-assisted thoracoscopic debridment with uneventful course. Then the patient had a normalisation of temperature, white globes, asthenia, but the chest X-ray on discharge, after tubes removal shows a "hole" on the operated lung (Fig 2). There could be many possible differential diagnosis: pulmonary abscess of several aetiologies, cyst, foreign body, false image... Therefore it was important to look at previous radiograph with the chest tube inside that showed one tube in place of the "hole" (Fig 3). In this manner it is possible to resolve the "mystery" of the odd hole. We named this as "sign of ghost drainage". Probably the silicon drainage that we used formed a



Fig I. Thoracic CT scan before surgery shows a right pleural effusion with parenchymal component and adjacent lung atelectasis.

Fig 2. Chest X Ray after removal of chest tubes with a "hole in the lung" (black arrow).

Fig 3. First post-surgical check of Chest X ray shows one tube in place of the "hole" and this radiograph can explain the case.

No potential conflict of interest.

Corresponding author: Giovanna Rizzardi, MD. Via Coppino,7, 12100 Cuneo, Italy. Tel: +39-171-642286; Fax: +39-171-642491. E-mail: giovanna.rizzardi@libero.it.

Submitted Aug 25, 2010. Accepted for publication Oct 05, 2010. Available at www.jthoracdis.com

ISSN: 2072-1439 © 2010 Journal of Thoracic Disease. All rights reserved.

temporary and small atelectasis of the adjacent lung visible in this radiographic projection as a hole.

With this particular case we want to emphasize the importance of knowledge of the patient's history and imaging. It is always important to consult the previous imagines before suggest peculiar diagnosis. Often the simplest answer is the most probable.