



Atypical Form of Pleural Disease and Diagnostic Challenges

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Clinical Image

A 64-year-old male presented with subfebrile temperature, night sweats and fatigue for several months, without respiratory symptoms. Latest findings of X-ray and computed tomography of the chest show progression – right pleura with irregular thickenings with mediastinal lymphadenopathy (Figure 1a, 1b). Transbronchial needle aspiration was performed with no malignant cells found. Fine-Needle Aspiration Biopsy (FNAB) under Thoracic Ultrasound (TUS) control was performed (Figure 1c, 1d) and the diagnosis of epithelioid mesothelioma (Figure 2a) was immunohistochemically proved by positivity on CK AE1/3 (Figure 2b), CK7 (Figure 2c), Wt-1 (Figure 2d), D2-40 (Figure 2e), HBME-1 (Figure 2f) and negativity for other applied markers.

TUS is sensitive diagnostic tool for pleural diseases evaluation including malignancy and have place in planning and performing interventional procedures [1]. FNAB under TUS control, although not common procedure, has its role in diagnostic of pleural diseases.

Teaching Points

- Malignant pleural diseases can be presented with general symptoms and no pain experienced.
- FNAB under TUS control could be useful to provide adequate tissue samples in atypical pleural diseases.

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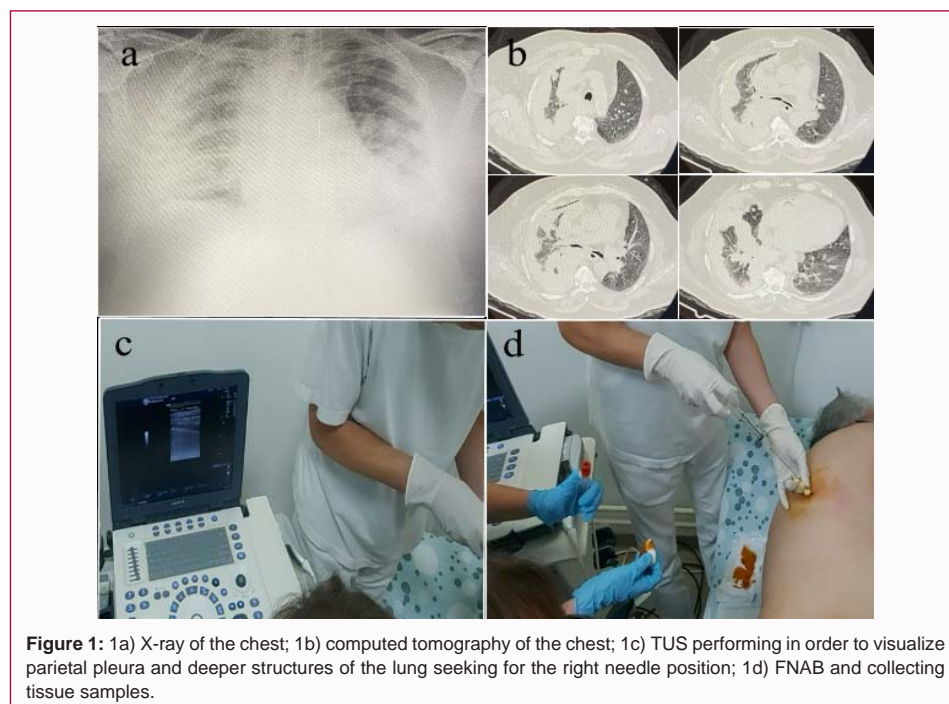


Figure 1: 1a) X-ray of the chest; 1b) computed tomography of the chest; 1c) TUS performing in order to visualize parietal pleura and deeper structures of the lung seeking for the right needle position; 1d) FNAB and collecting tissue samples.

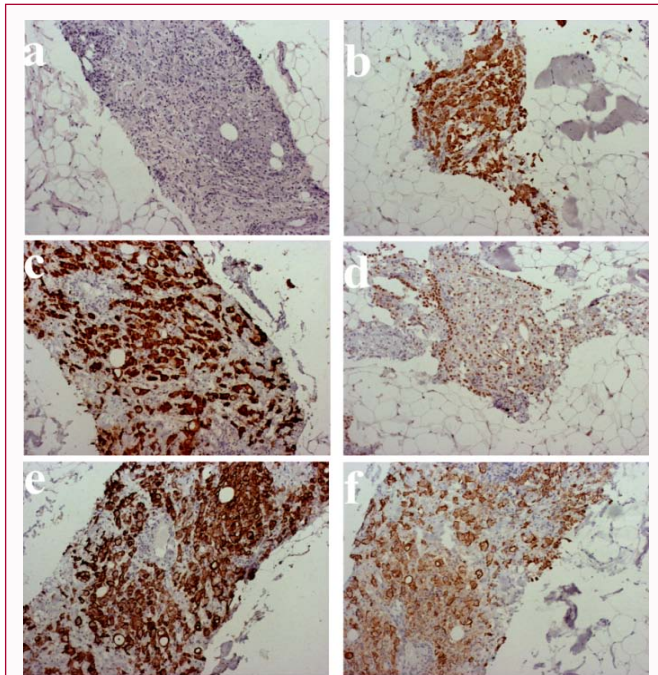


Figure 2: 2a) Histological picture of epithelioid variant of mesothelioma; 2b) positivity on CK AE1/3; 2c) positivity on CK7; 2d) positivity on Wt-1; 2e) positivity on D2-40; 2f) positivity on HBME-1. (Hematoxylin –eosin and immunostaining with hematoxylin counterstain, original magnification x200).

References

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