

# Cytopathologic Interpretation Of Transthoracic Fine-needle Biopsies

CANCER  
CYTOPATHOLOGY

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## Transthoracic Fine-Needle Aspiration Biopsy of Pulmonary Spindle Cell and Mesenchymal Lesions

A Study of 61 Cases

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**BACKGROUND.** Spindle cell and mesenchymal lesions of the lung encompass a wide variety of benign and malignant conditions. However, to the authors' knowledge, because of their rarity, few reports concerning their cytologic findings are available in the literature. The current review emphasizes the cytomorphologic features, differential diagnosis, and potential pitfalls associated with these lesions.

**METHODS.** Seven hundred seventy-nine percutaneous lung fine-needle aspiration (FNA) specimens were retrieved from the authors' cytopathology files over a period of 5 years. Sixty-one cases (7.8%) in which a spindle cell component was the dominant or key feature were identified. The authors reviewed the cytologic smears, immunocytochemical studies, and corresponding surgical material and clinical information.

**RESULTS.** Of these 61 aspirates, 33 (54%) were reactive processes (31 granulomas, 1 organizing pneumonia, and 1 inflammatory pseudotumor). Five cases (8.2%) were benign neoplasms (2 hamartomas, 2 solitary fibrous tumors, and 1 schwannoma). Twenty-three cases (38%) were malignant neoplasms (8 cases were primary tumors including 5 carcinomas with spindle cell or sarcomatoid features, 1 spindle cell carcinoma, 1 leiomyosarcoma, and 1 synovial sarcoma) and 15 cases were secondary tumors (including 9 melanomas, 2 leiomyosarcomas, 1 malignant fibrous histiocytoma, 1 meningioma, 1 sarcomatoid renal cell carcinoma, and 1 uterine malignant mixed müllerian tumor). A specific diagnosis was rendered in 52 cases (85%). No false-positive cases were encountered but there was one false-negative case. One patient who was diagnosed with granulomatous inflammation on FNA was found to have nonsmall cell lung carcinoma on subsequent transthoracic biopsy. No malignant cells were identified in the smears on review. The FNA from the organizing pneumonia was interpreted as a solitary fibrous tumor whereas the inflammatory pseudotumor was diagnosed as granulomatous inflammation. The FNA from one pulmonary hamartoma initially was considered to be nondiagnostic. One solitary fibrous tumor and the schwannoma were diagnosed as smooth muscle tumor and spindle cell tumor, not otherwise specified, respectively. Among the malignant tumors, the primary synovial sarcoma and one of the metastatic malignant melanomas initially were interpreted as primitive neuroectodermal tumor/Ewing sarcoma and poorly differentiated carcinoma, respectively.

**CONCLUSIONS.** Spindle cell lesions of the lung rarely are encountered on transthoracic lung FNA and are comprised of a wide variety of benign and malignant entities. By correlating clinical and radiologic data, cytologic findings, and ancillary studies, a high diagnostic accuracy rate can be achieved with FNA. *Cancer (Cancer Cytopathol)* 2001;93:187-198. © 2001 American Cancer Society.

**KEYWORDS:** fine-needle aspiration, transthoracic, cytology, spindle cell, sarcoma, lung.

Presented at the 88th Annual Meeting of the United States and Canadian Academy of Pathology, San Francisco, California, March 20-26, 1999.

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Received July 19, 2000; revision received December 29, 2000; accepted January 3, 2001.

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tmdcelebritynews.com: Cytopathologic Interpretation of Transthoracic Fine-Needle Biopsies: First Edition. ix, pages. 4to. Publisher's original blue cloth with white. Keywords: Fine Needle Biopsy, Fine-Needle Aspiration, Liver, Core Needle . the lowest quality of obtained material for cytopathological interpretation. Transthoracic Fine Needle Aspiration Increase Diagnostic Yield and. Thanks to advances in technology and cytopathology, the diagnostic power, .. and cytopathology have increased diagnostic power of TTNA, meaning that more MR fluoroscopy-guided transthoracic fine-needle aspiration biopsy: feasibility. Cytopathologic interpretation of transthoracic fine-needle biopsies. Book. Fine-needle aspiration, or FNA, is quick, safe, accurate, and inexpensive, and results of tissue biopsy when the FNA is performed and interpreted by skilled in considerably more revenue than comparable time spent on cytopathologic activities. Transthoracic fine-needle aspiration vs concurrent core needle biopsy in. Transthoracic needle biopsy (TNB) is a safe rapid method used to to have a significantly higher yield than fine-needle aspiration cytology. Key Words: guidelines; fine-needle aspiration biopsy; cytology;. Papanicolaou Society of and staining, 4) interpretation, and 5) communication and reporting. . tumor For transthoracic FNA, the pneumothorax rate can be as high as. Cytopathologic Interpretation of Transthoracic Fine-Needle Biopsies. New York, Paris, Barcelona, Milan, Mexico City, Rio de Janeiro: Masson Publishing USA. form rapid on-site evaluation for specimen adequacy of fine-needle aspiration and touch imprint of needle core biopsy lung cancer samples. Fine-needle aspiration (FNA) is a well-established procedure that is using the following search string: needle biopsy AND assessment or .. Clinical impact of on-site cytopathology interpretation on endoscopic ultrasound-guided fine . Computed tomography-guided transthoracic fine-needle aspiration. Percutaneous fine-needle aspiration (PFNA) biopsy is an accepted technique for the .. Cytopathologic interpretation of transthoracic fine-needle biopsies. Fine-needle aspiration (FNA) is a diagnostic procedure used to investigate lumps or masses. biopsy (FNAB) or fine-needle aspiration cytology (FNAC) (the latter to emphasize that any aspiration biopsy involves cytopathology not histopathology). Fine-needle aspiration biopsies are very safe, minor surgical procedures. We believe that FNA biopsy of these lesions can. The percutaneous fine-needle aspiration (FNA) biopsies .. Cytopathologic interpretation of transthoracic fine. Diagnosis by Fine-Needle Aspiration Biopsy thoracic fine-needle aspiration ( FNA) biopsy under fluoro- .. Cytopathologic interpretation of transthoracic fine. Transthoracic needle aspiration biopsy was performed in 41 dogs and two cats with diffuse interstitial lung Introduction. It often is difficult to acquire a specific diagnosis in small animals . technique for cytopathological interpretation. Dur-. Fine needle aspiration cytology of sclerosing haemangioma of the lung: case Bonfiglio T. Cytopathologic interpretation of transthoracic fine-needle biopsies. Existing reports on image-guided fine-needle aspiration biopsy have good tissue cores, on top of a probable benign radiologic interpretation. .. D.Y., and Dake, M.D.

CT-guided transthoracic needle aspiration biopsy of. Image-guided percutaneous transthoracic core-needle biopsy (PTCNB) is a . we believe that onsite cytopathologic evaluation of fine-needle aspirations or. [GREAT] Library  
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a well-established initial Furthermore, involvement of the cytopathology team with on-site on-site interpretation was  
performed during the procedure [5,6]. .. Gong Y, Sneige N, Guo M, Hicks ME, Moran CA: Transthoracic fine-needle  
aspiration vs concurrent core. Image-guided transthoracic needle biopsy (TNB) involves the percutaneous . is dictated by  
cytopathology results obtained during the initial needle passes. In patients with suspected advanced stage (i.e., stage IIIb  
or IV) non-small-cell carcinoma of lung (specifically adenocarcinoma) in whom Interpretation of results. Meaning of  
fine needle aspiration biopsy medical term. Diagnostic value of ultrasound guided transthoracic fine needle aspiration  
cytology in American Pathologists Interlaboratory Comparison Program in Non-Gynecologic  
Cytopathology. Background: CT-guided transthoracic needle biopsy is a well-established Fine needle aspiration biopsy  
(FNAB) requires the presence of a . Fine needle aspiration cytology of lung lesions: a clinicopathological and  
cytopathological review of A possible explanation for correlation between number of samples and.  
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