3) taller persons can climb stairs faster
Beware of the tall staff person who wants to do rounds quickly.

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REFERENCE

Hemomediastinum after Transbronchial Needle Aspiration

To the Editor:

Complications are rarely reported after fiberoptic transbronchial needle aspiration (TBNA). To date, Wang has described only two pneumothoraces and one pneumomediastinum resulting from this procedure. Reports of bleeding consist only of a few drops of blood at the TBNA site, despite the occasional aspiration of mediastinal great vessels. We report a case of pleuritic chest pain associated with hemorrhagic widening of the mediastinum after TBNA.

A 49-year-old male smoker was admitted for evaluation of a lung nodule. As part of study protocol, he underwent bronchoscopic examination with TBNA of the aortic-pulmonic window, carina, and right paratracheal regions. The patient had no evidence of a bleeding diathesis. During TBNA, the aorta was inadvertently aspirated and shortly afterward, the patient experienced sharp retrosternal chest pain which resolved when he sat upright. Following the procedure, the patient had intermittent mild re-occurrences of pain lasting several hours at a time. A follow-up chest x-ray examination (Fig 1) demonstrated the loss of previously identified aortic-pulmonic landmarks. Within 48 hours, the patient had complete resolution of pain and chest x-ray abnormalities.

Approximately 120 patients have undergone TBNA at our institution and occasionally vascular structures, including the aorta, have been punctured. No clinically significant consequences have occurred as a result of these vascular aspirations. In our patient, mild pleuritic chest pain led to the discovery of a spontaneously resolving hemomediastinum, without clinical deterioration. However, had the patient been anticoagulated or suffered from a bleeding disorder, the outcome may not have been so benign. Consequently, we recommend the prudent review of clotting parameters prior to mediastinal TBNA. With this additional precaution, we continue to believe mediastinal TBNA to be a safe procedure with little risk of infection or significant bleeding.3

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Opinions expressed herein are solely those of the authors and do not necessarily represent the opinions of the Army Medical Department, Department of the Army, or the Department of the Defense

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Elevated Adenosine Deaminase in Neoplastic Pleural Fluid

To the Editor:

Recent investigations have demonstrated that the determination of adenosine deaminase enzyme activity (ADA) is useful in the differential diagnosis of pleural effusions.1 ADA increases in the pleural effusions of tuberculosis, rheumatoid arthritis and empyemas.4 All authors seem to agree that ADA does not increase in neoplastic pleural effusions.45

We present the case of a 50-year-old patient admitted to hospital because of a massive left pleural effusion. Pleural fluid study results were as follows: pH 7.5, protein 6.68 g/dl, LDH 4,410 U/L, glucose 10 mg/dl, and ADA 81 U/L (normal value<45 U/L). Aerobic, anaerobic, and Löwenstein medium culture results were negative with a mixed cellularity composed predominantly of lymphocytes and adenocarcinoma cells. Sputum examination showed adenocarcinoma cells, but we failed to demonstrate Mycobacterium tuberculosis in pleural fluid, pleural biopsy sample, bronchoaspirate sample and sputum. In spite of this, and in view of positive PPD intradermonection, triple tuberculostatic treatment was initiated. Pleural fluid characteristics were unchanged after one month of treatment and the patient died shortly afterwards.

Adenosine deaminase is the enzyme required for the conversion of adenosine and deoxyadenosine to inosine and deoxyinosine, respectively. The highest ADA levels are found in T-lymphocytes and an increase in ADA is related to a stimulation of cellular immunity. This is the rational explanation that various authors use to expound the increase in this enzyme's activity in tuberculous pleuresy, empyema and rheumatoid arthritis.

Figure 1. A lateral shift in the pleural closure (arrow) of the aortic-pulmonic window is demonstrated after TBNA.