Communications to the Editor

Communications for this section will be published as space and priorities permit. The comments should not exceed 350 words in length, with a maximum of five references; one figure or table can be printed. Exceptions may occur under particular circumstances. Contributions may include comments on articles published in this periodical, or they may be reports of unique educational character. Specific permission to publish should be cited in a covering letter or appended as a postscript.

The Be-Happy Attitudes

To the Editor:

"Attitudes are more important than facts!"

I read with keen interest two editorials in my most recent copy of Chest (1986; 89:162-63), "An End to ARDS" and "Risk-Benefit Analysis in Chest Medicine." I then went on to read a third article, "Transbronchial Biopsy during Mechanical Ventilation," by Papin et al, to see if I could apply Robin's principles of risk-benefit analysis.

Papin et al performed transbronchial biopsy studies in 15 patients with respiratory failure (a life-threatening illness) who were sick enough to require mechanical ventilatory support. In five of their 15 patients, transbronchial biopsy sample was positive (one-third), but the benefit to these patients is open to serious question.

Risks to these patients were those of altered gas exchange, (widened alveolar-arterial gradients by a mean of 110 in nine of them) and reversible hypercapnia, 15 mm Hg in three patients. Three patients suffered minor bleeds, and one had a serious complication of tension pneumothorax. In our experience and that of others,1,4 tension pneumothorax is a clear-cut risk in patients on positive pressure ventilatory support, which is why we generally exercise and test diagnostic restraint until these patients are off the ventilator.

The authors state that the results of transbronchial biopsy sampling altered therapeutic management in seven cases. How so? Case 8 was shown to have cytomegalovirus pneumonitis, a disease clearly without any form of acceptable therapy.4 Corticosteroid therapy was started in patient 9 for diffuse interstitial fibrosis, a disease where clinical and laboratory findings have been clearly shown by Zavala5 and others to have sufficient clinical correlation with biopsy findings that histologic proof of diagnosis is rarely, if ever, needed and corticosteroids, when given, have a dubious place at best depending on the stage of fibrosis. Patient 10 was diagnosed as having hypersensitivity pneumonitis, a clinical diagnosis where confirmation comes from rechallenge with the offending antigen and where biopsy samples only show non-specific granulomas.6 Acyclovir therapy was begun for the patient with herpetic pneumonitis, but what that did for the patient God only knows.7 Appropriate chemotherapy was begun for the patient with ARDS and malignant histiocytosis. Who are we trying to kid? Biopsy is not indicated in ARDS.8 and appropriate or inappropriate chemotherapy for malignant histiocytosis gives us the same results, meeting our Maker sooner than we expect. Patient 9, on 100 percent oxygen therapy, who was given a tension pneumothorax surprisingly was alive, but the other unfortunate 50 percent did not make it.

In summary, the risk-benefit ratio in this albeit small but generally representative population of patients on a pulmonary service hardly seems justifiable.

I would consider the alternative procedure of bronchoalveolar lavage9 to be clearly the safer and better procedure with equally satisfying results and a nicer "be happy" attitude for physicians and patients, especially in a university hospital where the paramount importance given to numbers and data have taken precedence over acceptable patient care.9

Kudos to Drs. Robin and Burke of Stanford, California.

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References

To the Editor:

"Men willingly believe what they wish (to have read)"
De Bello Gallico III, 18; Caesar, J.

We have read with keen attention Dr. Vevaina's comments concerning our article on the potential use of the less invasive transbronchial biopsy (TBB) vs open biopsy during mechanical ventilation in which we concluded that TBB "deserves further evaluation." We also read the thoughtful yet provocative, as always, commentary of Doctors Robin and Burke on the cost and benefits of open lung biopsy in immunosuppressed hosts. We fully agree that a prospective controlled clinical trial of both TBB and open lung biopsy utilizing meaningful survival as the outcome is essential to define the role of lung biopsy in immunosuppressed patients and selected patients with acute respiratory failure. Such a clinical trial must define subsets of immunosuppressed hosts, the prior determination of the likelihood of survival from the underlying disease process, etc. We are not as sanguine in predicting a negative outcome in a nonselective evaluation of all patients at risk, albeit it is our prejudice. On the contrary, one can reasonably expect to identify...
certain groups in whom biopsy results will improve meaningful survival. Such a multicenter trial would require considerable external support and several years of data collection. The large number of patients seen each day who may benefit (live and be well) or lose (morbidity or mortality) firmly supports the need for such a study.

The writer's perception of risks is perplexing. Transient widening of the alveolar-arterial gradient clearly was not clinically significant; a similar, if not greater, widening will occur at bronchoalveolar lavage (BAL). A tension pneumothorax is indeed a risk in patients receiving positive pressure ventilatory support if it is not promptly recognized and satisfactorily treated. The relevance of citing tension pneumothorax during rigid bronchoscopic examination in a 6-day-old infant who survived is unclear.

We also thoroughly agree with David E. Reuben's editorial on "learning diagnostic restraint." We live and teach by example his basic principle of medicine: if the outcome of a test will change therapy in a patient, the physician should perform the safest test that will provide the necessary information to guide treatment. To have delayed until these highly-selected patients were "off the ventilator" could have led to seeking post-mortem specimens.

We agree that there is no specific therapy for cytomegalic virus pneumonia. However, discontinuation of corticosteroid therapy did eliminate potential added immunosuppression in this patient who survived. A diagnosis of diffuse interstitial fibrosis requires tissue confirmation in a patient with rapidly progressive symptoms, bilateral diffuse disease on roentgenographic examination, and respiratory failure. One man's "dubious place at best" for corticosteroid treatment in DIF is a 30 percent physiologic response in the current literature, our living patient was amongst this number. We agree that hypersensitivity pneumonitis is a clinical diagnosis where the exposure history alone, or rarely, and with great care, a re-challenge, is diagnostic. However, rechallenge of a patient with hypersensitivity pneumonitis requiring mechanical ventilatory support is inconceivable; history will confirm the diagnosis, and steroid therapy is effective (revised Pink). This patient also survived. Although there are no clinically controlled trials, acyclovir therapy is recommended for herpetic pneumonitis.

The conclusion that BAL is safer and better than TBB is rather subjective. Certainly, BAL sampling is incapable of indicating the diagnosis of malignant histiocytosis, hypersensitivity pneumonitis, diffuse interstitial fibrosis, or invasive fungal infections (organisms in BAL are not diagnostic). Dr. Reuben does not say that "in a University Hospital . . . the paramount importance given to numbers and data have taken precedence over acceptable patient care." He does opine that this is often the case, but simultaneously identifies "a new breed of academicians . . . who (are studying) tests and their usefulness." He challenges the academic physician to "not equate this ability to know with the need to know."

Clearly, we have suggested further evaluation of TBB, a less invasive procedure, when progressive infiltrates occur in acute respiratory failure requiring mechanical ventilation—not its adaptation. We believe that a 50 percent survival rate in this quite varied but extraordinary ill group of patients was cost-effective, to us and to each of them.

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REFERENCES


Spontaneous Bilateral Pneumothorax Due to Metastatic Cervical Carcinoma

To the Editor:

We read with interest the paper by Steinhaulein and Cuttatt (Chest 1985; 88:709-12) and agree with the authors that pneumothorax associated with carcinomatous involvement of the lung is associated with a grave prognosis, whether primary or secondary in origin. We wish to report a patient with spontaneous bilateral pneumothoraces as the presenting sign of pulmonary metastases from cervical carcinoma.

CASE REPORT

A 31-year-old black woman, with stage IV squamous cell carcinoma of the cervix, was admitted to the hospital with bilateral pneumothoraces. She was cachectic with stable vital signs and bilateral posterior chest tubes in place. Auscultation of the lungs revealed scattered rhonchi; cardiovascular examination was normal. The patient was diagnosed as having metastatic cervical carcinoma seven months prior to admission (PTA) and received radiation to the lumbar spine and left ureter. Three months PTA she had a left pneumothorax which resolved spontaneously and recurred two weeks later, requiring chest tube placement. Bronchoscopic examination failed to reveal a diagnosis of neoplasm or interstitial lung disease. One month PTA she developed a right pneumothorax, with chest x-ray film demonstrating a cavitation lesion. Over a period of three weeks the right pneumothorax increased, requiring chest tube insertion. The right PTA she experienced acute shortness of breath with recurrence of the left pneumothorax. A chest tube was inserted and she was transferred from the chronic care facility to our hospital. Although she smoked one pack of cigarettes per day, she gave no history of underlying lung disease.

Upon admission, chest x-ray examination revealed chest tubes with residual pneumothoraces and a right mid-lung cavity (Fig. I). Over a 48 hour period the right lung fully expanded. However, a persistent air leak prompted left thoracotomy. Wedge resection of the superior segment of the lower lobe was performed. During surgery, open bronchopleural fistula and necrotic tumor were found. Pleurodesis with tetracycline was performed, and anterior and posterior chest tubes were inserted. Pathology of the lesion demonstrated poorly differentiated metastatic squamous cell carcinoma. The right chest tube was removed after tetracycline instillation, and

Figure 1. Anteroposterior chest roentgenographic film. Bilateral pneumothoraces with right mid-lung cavity. Bilateral chest tubes in place.

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