monia or pulmonary infiltrates with eosinophilia (PIE) presenting as acute respiratory failure? Certainly the case described in their letter is an interesting example of chronic eosinophilic pneumonia progressing to acute respiratory failure and requiring mechanical ventilation. However, the diagnosis of chronic eosinophilic pneumonia was possible only when the patient relapsed, not when he presented acutely. Although no figures are available, a case like this must be fairly unusual. We considered this possibility, but neither patient seemed to have a clinical course consistent with chronic eosinophilic pneumonia. The first patient had chronic myelogenous leukemia in the accelerated phase. He had been carefully followed for several years by his hematologist, who felt that all of his symptoms were related to his profound anemia and underlying leukemia. When he presented with acute respiratory failure and bilateral infiltrates, it was assumed he had opportunistic lung infection. His lung disease responded to the institution of corticosteroid therapy as described in our paper. The patient died a few months later of leukemia. The second patient presented with acute respiratory failure and had no previous lung disease. He was treated with high dose steroids for two weeks during his episode of acute respiratory failure. He was discharged without corticosteroid therapy. Subsequent clinic visits have shown no evidence for any lung disease in this patient. In preparing the paper, we felt that these patients did not fit the usual clinical criteria for chronic eosinophilic pneumonia or PIE. This becomes a matter of whether one is a "lumper" or "splitter". How far do we extend the original definitions of a disease process before a new entity needs to be described? However, the main purpose of our article was not the description of a new entity. Rather we wanted to point out the usefulness of finding a large number of lavage eosinophils in the setting of acute respiratory failure of unknown etiology. We stand by our claim that a high percentage of lavage eosinophils suggests a non-infectious cause of acute respiratory failure that may be corticosteroid-responsive. This is all the more unique and important now that controlled series of ARDS currently being submitted for publication prove that steroid therapy has no efficacy in ARDS.

We agree with Drs. Whitlock and Tenholder that disparity may exist between BAL findings and biopsy results. In our own study, only one of the patients had pulmonary eosinophilia confirmed by biopsy. This disparity may represent a sampling error or, as mentioned in our paper, eosinophilic inflammation of the small airways and/or bronchioles.

In terms of the "national debt" (reference 5), many acute respiratory failure patients have bronchoscopy and BAL as a matter of course looking for an infectious agent. Cytopreparation of the lavage fluid is easy and inexpensive. In our cases we believe it led to the institution of steroid therapy and rapid recovery of the patients.

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REFERENCES

Cryotherapy or Nd-YAG Laser in the Treatment of Tracheobronchial Tumors?

To the Editor:

We have read with great interest the article of Homasson et al. (Chest 1986; 90:159-64) concerning bronchoscopic cryotherapy. Our experience in this technique confirms that cryotherapy is a safe and effective method.

In three months, we treated eight patients with the method described by Homasson (cryprobe introduced in a rigid bronchoscope). In these cases (five squamous cell carcinomas, one endobronchial hamartochondroma, one carcinoid tumor, one cylindroma), cryotherapy was preferred to laser therapy because of complete bronchial obstruction in three cases, long stenosis with submucosal involvement in five cases. Among these eight cases, two patients were previously treated by laser therapy without success.

During these three months, we treated eight other patients (tracheobronchial squamous cell carcinoma, six cases; benign post intubation tracheal stenosis, two cases) by Nd-YAG laser.

In six of eight cases, cryotherapy was effective. The result was assessed ten days later after cryotherapy on chest x-ray film changes (reventilation) and on the endobronchial destruction of the tumor.

In one case, tumor destruction was incomplete without reventilation. In the last case results could not be appreciated. No side effects or complications occurred after cryotherapy.

Laser therapy was very effective in four of eight cases, on protruding tumors and short bronchial stenosis, but useless on extensive bronchial stenosis and submucosal involvement.

Histologic study of the bronchial tumor was not possible after laser therapy. On the other hand, immediate biopsy showed no change on histologic findings after cryotherapy. Ten days after cryotherapy, bronchial biopsy specimens showed necrotic tissue. However, in two cases benign epithelial metaplasia was observed.

In our experience, Nd-YAG laser and cryotherapy are two complementary methods. Laser seems better in protruding tumor cases and in tracheal-narrowing stenosis. Although it is an expensive method, it gives immediate results. Cryotherapy is a safe and effective method and destroys various types of endobronchial tumors. The result was delayed. On bleeding tumors, the coagulating effect of cryotherapy was immediate and remarkable.

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To the Editor:

The intent of Vergnon et al's letter is to compare two methods, cryotherapy and Nd-YAG laser therapy, in the treatment of tracheobronchial tumors. We have no experience with laser therapy and are satisfied that, in some cases, cryotherapy gives better results than laser therapy. We confirmed that histologic findings do not change immediately after cryotherapy and that biopsy samples can be taken without hemorrhage. We shall soon use cryotherapy during thoracoscopic examination; the destruction of tissues by coagulating resection will be avoided, and the quality of histologic samples will be better. Since the publication of our paper, we have also treated three patients with bronchial fibrous stenosis associated with bronchiectasis occurring after tuberculosis, thus avoiding surgical resection.

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Artificial Sapphire Contact Endoprobe with Nd-YAG Laser in the Treatment of Subglottic Stenosis

To the Editor:

Tracheobronchial obstruction resulting from benign and unresec-