definitive diagnosis and bleeding may occur during the procedure. Only further experience will define the precise role of biopsy in the evaluation of suspected Kaposi's sarcoma involving the tracheobronchial tree.

Kam-Yung Lau, M.D.; Janet Ao, M.D.; Alan Rubin, M.D.; Michael Littner, M.D., F.C.C.P.; and Marcel Krauthammer, M.D., F.C.C.P.; Veterans Administration Medical Center, Sepulveda, and the UCLA School of Medicine, Los Angeles

To the Editor:

Although the diagnosis of Kaposi's sarcoma of the tracheobronchial tree can sometimes be made histologically by biopsy at fiberoptic bronchoscopic examination in the setting of the acquired immune deficiency syndrome, we feel that biopsy of these tracheobronchial lesions is usually unnecessary; the diagnosis of widespread Kaposi's sarcoma is frequently already established histologically (ie, by skin or lymph node biopsy). The tracheal and bronchial lesions are highly characteristic in appearance and they may bleed when biopsied. Further, the diagnostic yield of biopsy samples may be low.

We have now performed fiberoptic bronchoscopic examination on nine patients who had endobronchial and/or tracheal lesions which appeared characteristic of Kaposi's sarcoma (ie, bright red to violaceous vascular lesions). As in the case reported by Lau and colleagues, all nine patients had Kaposi's sarcoma extensively involving the skin, proven by biopsy prior to the fiberoptic bronchoscopic examinations (which were performed to diagnose unexplained pulmonary infiltrates). The diagnosis of Kaposi's sarcoma of the tracheobronchial tree was made from bronchial biopsy samples in only one (11 percent) of these nine patients, but was confirmed at autopsy in an additional five patients. Three (33 percent) of the nine patients had self-limited 20 to 50 ml mucosal bleeds following the bronchial biopsy procedure.

Arthur E. Pitchenik, M.D., F.C.C.P.; Margaret A. Fischl, M.D.; and Mario J. Saldana, M.D.; University of Miami, Miami, Florida

Costs In the ICU

To the Editor:

In the recent study, Butler et al (Chest 1985; 82:229-33) evaluated the relative profitability of providing critical care to seriously ill/elderly patients in relation to cost and reimbursement under the present DRG payment system adopted by Medicare. Based on their finding of a 4.7 million dollar revenue loss treating 446 patients, the authors concluded that "this should send a clear message to hospitals concerning the care given to these patients." We are concerned about the potential negative impact on health care for the elderly resulting from a study such as this. With this in mind, we would like to note the following significant omissions from their analysis of cost data.

The methods used in this study to determine costs were not well-planned. The cost generated by these 446 patients was $11.1 million, or $1,200 per day, $50 per hour for every hour the patients were in the hospital, ICU and non-ICU. The authors stated that costs were calculated by multiplying patient billed charges by cost-to-charge ratios. This method of determining costs represents the accounting cost for the patient and not the true economic cost of providing care to these patients.1 If the authors' purpose was to determine how many more dollars were spent on the use of intensive care over routine care, economic costs would have been more appropriate.1 Instead, the authors, concerned with break-even and/or profitability of patient care, chose to use accounting cost, a process which may grossly distort true economic costs. In so doing, they were able to avoid investigating the true costs of these patients to the health care facility. Had these been determined, the authors could have compared them to the exact cost of providing care to these patients under an alternative system of care. By this method, the authors would have found the marginal cost difference of the patients to the health care facility, thereby measuring the economic efficiency, rather than profitability, of not providing intensive care for Medicare patients.

Having chosen to examine only accounting costs, with a resultant four-million dollar loss to the health care facility, the authors then suggest that a "responsible management response" to this loss might require the reduction or elimination of health care for these patients. Whether or not this is a viable alternative, one would have to assume that care for these patients would be provided in non-critical care areas. Would the institution, in fact, realize any savings?

Resources consumed by the patients would remain almost unchanged, merely transferred to a different cost center where a higher volume of patients would be reflected in lower accounting costs. At the same time, unless new patients not subject to DRG reimbursement structure were to replace these patients in the Intensive Care Unit, the fixed costs of the Intensive Care Unit would remain unchanged. The hospital still has to pay for the space, as well as maintenance of the high technology. Labor costs of the Intensive Care Unit would not change. Presumably, the hospital would increase billing to the non-DRG patients to maintain profitability.

Furthermore, the authors chose to increase all costs by 16 percent to reflect "estimated increases in cost per discharge between 1983 and 1985." Once again, we are not provided with adequate justification. Theoretically, as we become more familiar with our technology, the cost of technology application should drop. This has certainly been true in areas such as renal dialysis and cardiac bypass, where the cost per patient has decreased significantly since their introduction. Without major breakthroughs in intensive care technology, it is difficult to comprehend an increase of approximately $4,000 per patient in two years. A more detailed analysis of the inflation factor would help the industry in holding down costs.

Finally, one must examine the ethical issues involved. In an accompanying editorial (Chest 1985; 82:141), Weinberg implies that huge amounts of money are spent futilely on the terminally ill and patients who cannot get well. Yet, in practice, clinicians are often faced with utilizing high technology in situations where an elderly patient's outcome remains uncertain. Despite extensive work during the past ten years, early predictive indices of patient outcome remain unreliable. An error factor of even 5 percent, when applied to 446 patients, would result in an erroneous prediction in 25 patients, or more than one patient every two weeks. Since there is a significant potential for negative outcome, ie, preventable morbidity or mortality, are we justified in restricting care on the basis of uncertain financial considerations?

We agree with The Presidents Commission on Life Support that it would be more desirable to cut costs in areas where outcome is unlikely to be affected, rather than discontinue intensive care services for the elderly and severely ill patients.4

B. Mamdani, M.D.; C. Franklin, M.D.; K. Weiss, M.D.; and G. Burke, M.D., Cook County Hospital, Chicago

REFERENCES

1 Finkler SA. The distinction between cost and charges. Ann Intern Med 1982; 96:102-09