To the Editor:

We thank Dr. Manresa and colleagues for their interest in our study on the use of corticosteroids in tuberculous (TB) pleurisy. The study by Dr. Galarza and colleagues was similar to our study, but could not be discussed by us, as our article was already accepted when their article was published.

Despite different methodologies, the main outcome of both studies was that corticosteroids added to antituberculosis chemotherapy do not make any difference to the clinical course of TB pleurisy and have no effect on residual pleural thickening. There are, however, several aspects in their letter to which we would like to respond in more detail.

We agree that thoraccopy is not an essential procedure to diagnose TB pleurisy. For the purpose of our study we thought it absolutely necessary to include only patients with proven TB pleurisy. The superior diagnostic yield of thoracscopy compared to needle biopsy is reflected in the 100% confirmation of TB in our patients, compared to 63% proven TB diagnosis in the study by Dr. Galarza and colleagues. Furthermore, direct inspection of the pleural cavity permitted an assessment of the extent and the degree of the associated inflammatory changes, which in our study resulted in well-matched groups in this respect. Although unknown, it is conceivable that the rate and extent of resolution of the pleural pathology may well be different if there is a grossly inflamed and thickened pleura with multiple fibrous adhesions compared to when the pleura is only slightly inflamed and has no or only few fibrous adhesions.

We agree with Manresa et al that not every pleural effusion needs complete drainage. However, 84% of our patients had large (more than 50% of a hemithorax) or even massive effusions that we would have drained for symptomatic relief irrespective of the method used. The total drainage also enabled a much better assessment of the lung parenchyma. Parenchymal evidence of lung tuberculosis was seen in a surprising 94% of our patients. Complete drainage resulted in immediate normalization of accompanying fever in all but one of our 74 patients. With partial drainage in the patients studied by Galarza et al it took 3.32 (range 0-50) days in prednisone-treated patients and 4.15 (0-60) days in the placebo group to normalize their temperatures. We stated that all of the clinical parameters assessed, the main factor responsible for symptomatic improvement was the initial complete drainage prior to the start of chemotherapy and the trial medication. The subsequent, slightly earlier improvement in symptoms in the prednisone group was statistically, but not clinically, significantly different in favor of the prednisone group.

A difference in morbidity, or the lack thereof, between complete and partially drained effusions cannot be deduced from, or between, the studies, as this was not directly compared. Also, the parameters of morbidity were not mentioned in the study by Galarza et al. If the postdrainage symptomatic improvement in our patients would have been anticipated we would have included a third leg in our study to assess the effect of partial vs complete drainage.

We cannot comment on the two-drug antituberculous chemotherapy regimen used by Galarza et al. It may well be that in their patients, who were on average 4 to 6 years younger than our patients, the TB pleurisy was indeed due to a small number of organisms, reflecting a mostly hypersensitivity type of pleural reaction secondary to a ruptured subpleural primary complex. However, with very extensive pleural involvement in more than 90% of our patients, evidenced by the macroscopic appearance, Ziehl-Neelsen stains, and positive biopsy cultures, as well as the high incidence of parenchymal involvement and the prevailing local pattern of drug resistance, we could not dare to treat our patients with only two antituberculous agents.

From their paper it is not clear how Galarza and colleagues prospectively quantitated the amount of fluid to be withdrawn to leave one-third of a hemithorax filled with fluid in order to study the effects of the prednisone.

In summary, we feel that the main message of both papers is clearly that corticosteroids have no place in the treatment of TB pleurisy, but that the issue relating to complete or partial drainage of TB pleural effusion has not been resolved.

Christoph Wyser, MD
Department of Internal Medicine
Division of Pulmonology
Kantonspital
Basel, Switzerland

Bernard W. van de Wal, MD
Department of Internal Medicine, and Stellenbosch University
Pulmonary Unit for Research (SUPUR)
University of Stellenbosch
Cape Town, South Africa

REFERENCES

Questioning Chest Physiotherapy

To the Editor:

There are serious concerns regarding the validity of the conclusions from the study by Alexander and colleagues (August 1996). Flaws in study design and reporting include the process of inclusion of patients in the study, the lack of description of the major independent variable being investigated (namely, “chest physiotherapy”), and gross generalization on the basis of such a poorly designed investigation.

Patients were randomly allocated to one of two groups (intervention or control) within 24 to 48 h after the Respiratory Therapy Department initially received the request for chest physiotherapy. An average of 16 such treatments were provided to patients allocated to the intervention group. The reduced level of chest physiotherapy provided to the intervention group does not signify that this treatment is not required for the patients allocated to this group. A more appropriate study design would have included a comparison group that did not receive chest physiotherapy compared to a group that did. This investigation is hardly reproducible in its present form and is disappointing. The authors may have achieved their aim of reducing costs as a result of reduced provision of chest physiotherapy services to a select group of patients, but they have done so without the use of rigorous scientific methods.

The use of terms such as chest physiotherapy without complete description of the procedures used and reasons for use is to be deplored and continues to result in poor scientific investigation and reporting. The interpretation of poorly designed research may result in inappropriate patient care and confusion. Secretion clearance techniques, such as postural drainage and chest wall percussion, may be effective when copious amounts of sputum are present, but in patients without mucus hypersecretion (deemed not to benefit from chest physiotherapy by Alexander and colleagues), there are clear benefits when such therapy