hyperinflation associated with the obstruction, which is the functional condition of the risk of pneumothorax. Simple spirometry without determining lung volume does not allow this group at higher risk to be identified. This could be the cause of the difference in results from the various authors who did not take residual volume into consideration.

In particular, in the study by García-Río et al, the FEV₁ values of the population with the pneumothorax were particularly low (56±10%), which implies a greater association with hyperinflation. Unfortunately, the incidence of patients with a pathologic FEV₁ (<70%) was not given (it was 19% in our population). The different results in predictivity of FEV₁ seem to be conflicting; but without the calculation of residual volume, it is not possible to know whether the patients with altered FEV₁ and pneumothorax also had significant alveolar hyperinflation. With regard to the conclusion of our study, we do not disagree with García-Río et al, but we state again that spirometric examination with the determination of static and dynamic lung volumes is useful prior to PNB.

Patrizio Vitulo, MD
Division of Pneumology
IRCCS "S. Matteo"
Pavia, Italy

Reprint requests: Dr. Patrizio Vitulo, Div of Pneumology, IRCCS "S Matteo", P. le Golgi I, 27100 Pavia, Italy

REFERENCES

Advanced Pulmonary Histiocytosis X Is Associated With Severe Pulmonary Hypertension

To the Editor:

Histiocytosis X (HX) is a rare disease that can involve destruction of the lung parenchyma, due to the proliferation of Langerhans' cells in the airspace. Lesions present an almost entirely peribronchial distribution, and therefore, the disease could be considered a bronchiolitis.

On the basis of radiologic CT findings of increased size of the pulmonary arteries, some reports have suggested the presence of pulmonary hypertension (PH) (Fig 1).1,2 In 1990, Cunningham and Parkinson3 described the obstruction of vascular lumina due to the proliferation of Langerhans' cells in some cases of lung HX with PH. This observation, however, has never been confirmed by extensive hemodynamic studies, to our knowledge.

From 1996 to December 1995, 21 patients with advanced pulmonary involvement due to HX were addressed to our institutions for lung or heart and lung transplantation. A histologic diagnosis was available in 15 cases, while in two patients, radiologic features consistent with the presence of bone eosinophilic granuloma were present. In two more patients, an elevation of CD1a-positive cells (more than 5%) on bronchoalveolar lavage strongly supported this diagnosis, while in the remaining two patients, a clinicoradiologic diagnosis was accepted. Pulmonary function tests (PFTs) and hemodynamic data are reported in Table 1.

Twenty of 21 patients presented a certain degree of PH, 12 a severe degree (mean pulmonary artery pressure ≥50 mm Hg). The level of PH was not related to the impairment of PFTs, in particular to hypoxia. Actuarial survival at 50 months was 58% and none of the PFT or hemodynamic data resulted in prognostic factors. Moreover, a similar degree of PH was not observed in patients with lymphangioleiomyomatosis (n=8) or pulmonary fibrosis (n=43) evaluated for lung transplantation.

Simon Gompertz, MD
Ash Bach, MD
Martin B. Allen, MD, FCCP
Department of Respiratory Medicine
North Staffordshire Hospital
Staffordshire, United Kingdom

REFERENCES