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To the Editor:

Lombardi and Specini refer interesting findings concerning the small airways dysfunction (SAD) and bronchial hyperreactivity in nonsmoking patients with systemic sclerosis (SS). They report high prevalence of SAD in their patients that is different from what was reported in our study. We would like to note a discrepancy between the reported number of patients with a reduction in MEF_{25} that consisted with isolated SAD and the rest of their findings. They describe five patients with normal pulmonary function. So the highest prevalence of isolated SAD that could be found is not greater than 45 percent (5/11 patients), one more patient had also restrictive pattern of abnormality. Concerning the lower frequency of SAD that we found in our patients, it is consistent with the restrictive defect or diminished diffusion capacity (or both), which is referred as the cornerstone of physiologic changes in scleroderma and also is in agreement with the findings that were reported in the majority of the related studies.

Lombardi and Specini in contrast with our findings report SAD as an early feature of pulmonary involvement in SS, even though only of seven of their SAD patients had also an restrictive pattern of abnormality (one patient), or diffusion impairment (five patients). We think that the coexistence of these abnormalities does not justify the concept of SAD as an early feature of the disease.

We found the performed study of bronchial hyperreactivity in their SS patients very interesting. The lack of hyperreactivity that they report might suggest that chronic airways inflammation does not substantially contribute to the manifestation of SAD in SS patients.

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Table 1—Oral Hygiene vs Sputum Grade

<table>
<thead>
<tr>
<th>Collection Method</th>
<th>Good* (%)</th>
<th>Not Good (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral hygiene</td>
<td>18a (62)</td>
<td>11 (38)</td>
</tr>
<tr>
<td>No oral hygiene</td>
<td>70b (55)</td>
<td>61 (47)</td>
</tr>
</tbody>
</table>

*Good (ie <10 squamous epithelial cells/100Xmicroscopic field; a=16 had >20 polymorphonuclear leukocytes [PMN], b=52 had >20 PMN/100Xmicroscopic field.

In practice, however, specimens often are heavily contaminated and yield ambiguous culture results. Many healthcare providers assume that removal of dentures, brushing the teeth, or rinsing the mouth with water before collection is likely to yield a better specimen. This may be a false assumption.

Between January to May 1993, 160 patients were retrospectively questioned within 24 h, about oral hygiene before collection of sputum for culture. Specimens were graded by microbiology personnel who were blinded to collection methods. There was no significant difference (Table 1) in the proportion of good specimens from patients with and without oral hygiene (p=0.39, x^2 0.05 level of significance).

It is our opinion that oral hygiene as described above, has little if any effect on the quality of sputum. We believe more studies should be performed on practical methods or agents or both for decontaminating the oral cavity before expectoration. Specimen collection methods are a pertinent concern because the number of sputum cultures per year in the United States has been estimated to be 5 to 8 million.

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Foreign Body Aspiration With Mediastinal Migration and Superior Vena Cava Penetration

To the Editor:

A 37-year-old man was admitted with the complaints of intermittent chest pain and blood-streaked sputum for 2 months. Chest radiography and computed tomography showed a needle-shaped, metal density material over the right upper lung field near the mediastinum (Fig 1). A broken barbed broach was lost in his posterior pharyngeal cavity during endodontic treatment 5 months earlier. A 4-cm long, needle-like material was found intraperatively in the mediastinum with the sharp end penetrating into the superior vena cava. It was removed smoothly and a
broken barbed broach was proven (Fig 1, left lower corner).

Foreign body aspiration was often not considered in adults with minor symptoms. Sharper material has a higher possibility for penetration or migration. It may have caused complications such as pneumothorax, pneumomediastinum, hemopericardium, or pleurocutaneous fistula. Nonetheless, manifestation of aspirated foreign body with mediastinal migration and vessel penetration has never been reported before. Prevention of foreign body aspiration or swallowing during dental manipulation was most important for every dentist.

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REFERENCES

Equip the Units With Oxygen Sensors

To the Editor:

I am a patient with pulmonary emphysema of long duration, and I have been on continuous oxygen therapy for about 4 years. I also happen to be a Professor of Environmental Health Sciences (Cardio-Pulmonary Physiology) at the Johns Hopkins Medical Institutions. During the last 4 years while I was on oxygen therapy, I have experienced nine breakdowns of my oxygen concentrator units. In each case, the unit appeared to be functioning correctly, its compressors cycled on and off normally, and there was no visual or sound indicators that anything was wrong, but it delivered only 60 percent oxygen instead of the 93±3 percent oxygen it was supposed to deliver. The only indicator was my acute distress, and when I checked myself with oxygen from a liquid source, the distress disappeared and it became clear that the concentrator unit had failed. These concentrator machines were from four different manufacturers, but all four seemed to fail sooner or later. I now believe that these units are inherently prone to break down.

The average patient who does not have access to special physiologic equipment would require admission to an emergency room and, if the problem was not corrected, would indeed be in dire straights.

Is it too much to ask that these concentrator units be equipped with oxygen sensors that are now standard in most new cars to check engine performance, or are human beings of so little importance compared with our automobiles?

A simple directive by the Lung Association that "oxygen concentrator units without suitable indicators of oxygen supply failure will not be considered suitable for patient use" would solve this problem.

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Errata

In the article "Early Sepsis Treatment With Immunoglobins After Cardiac Surgery in Score-identified High-risk Patients," by Dr. Günter Pilz et al (Chest 1994;105:76-82), the line, "...APACHE II scores, especially in the high-risk group (IgG, ..." was omitted from the abstract, bottom, column 1. The high-risk APACHE scores should read ≥24 in the abstract and on pages 77 and 78.

In the article "Diagnosis of Traumatic Mediastinal Hematoma With Transesophageal Echocardiography" by Dr. Le Bret et al (Chest 105:373-76), the sentence beginning at the bottom of column 1 page 373 and continuing to page 374, should read, "According to our experience of TEE, the following signs were considered for diagnosis of mediastinal hematoma: sign 1—a widening of the space between the esophageal probe and the thoracic aortic wall (Fig 2); this distance was measured on the videotape screen retrospectively; sign 2—a double contour of the aortic wall (Fig 3); and sign 3—visualization of ultrasound signals between the aortic wall and visceral pleura (posterolateral aortic wall side) (Fig 4)."