or repetitive antigenic stimulations, combined with advancing age. Epithelial cells could be a significant source of neutrophil chemoattractants, which contributes to a low-grade inflammation in older subjects. Persistent, low-grade inflammation could damage elastin and perhaps lead to the age-associated loss of elastin fibers. Therefore, considering that many patients affected by asthma or COPD who increasingly perform induced sputum are often > 50 years old, these findings deserve further investigations.

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References

Ribavirin Should Be Tested in Clinical Trials in Combination With Other Antiviral Agents for Severe Acute Respiratory Syndrome

To the Editor:

We read with interest the article in CHEST by Chion et al (July 2005) and offer the following comments. The ribavirin-treated patients had higher lactate dehydrogenase levels, a well-known adverse prognostic factor in severe acute respiratory syndrome (SARS). The nonsignificantly higher mortality could be due to the more severe disease in this group. Viral load, another important predictor of mortality, was not available. Moreover, Figure 1 seemed inaccurate: the survival in ribavirin-treated patients should be 0.88 at day 30 (5 of 44 patients died) instead of 0.71.

Classifying the ribavirin-treated patients into hypoxic and nonhypoxic subgroups (Table 2) and attributing the higher mortality in the hypoxic subgroup to ribavirin was problematic, as both subgroups were treated with an identical protocol of ribavirin. From the data presented, a more likely explanation for the more severe drop in hemoglobin in the hypoxic subgroup was that they had more severe disease. The survival curves in Figure 4 also appeared inaccurate: the survival in patients with drop in hemoglobin > 2 g/dL should be 0.69 (5 of 16 patients died) instead of 0.45. Hence, the result of the log-rank test (p = 0.007) needs to be justified.

Only factors that were potentially associated with hypoxemia were analyzed in Table 2. No univariate or multivariate analyses on factors related to death were reported. The conclusion that hemoglobin level was the only factor associated with death was not supported by the data presented.

In Figure 6, the shaded triangles were supposed to represent the hemoglobin of patients who were hypoxic and had received ribavirin. There were 22 triangles, but there should only be 17 patients. In addition, expressing the survival of individual patients by proportion (y-axis) is difficult to understand.

Therefore, there is no convincing evidence that ribavirin has contributed to a life-threatening drop in hemoglobin or mortality in this report. As of today, three independent studies have shown ribavirin to have in vitro activities against SARS-coronavirus, alone or in combination with other agents. Ribavirin should be tested in future randomized controlled studies in combination with other potential antiviral agents for SARS.

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A Modified Percutaneous Tracheostomy Technique Without Bronchoscopic Guidance

A Note of Concern

To the Editor:

We read with interest the article in CHEST by Paran and colleagues (September 2004) on a modified percutaneous tra-
Melloni and colleagues expressed their concern regarding possible complications following the modified technique of percutaneous tracheostomy. They hypothesize that the skin incision using the sternum as a reference point could result in wrong placement of the cannula. Since the technique described in our report is primarily based on limited blunt dissection of the subcutaneous tissues, it allows accurate positioning in insertion of the cannula. We believe that the surface landmark should serve only as a guideline, as opposed to the strict percutaneous tracheostomy, which relies entirely on surface landmarks and thus necessitates bronchoscopic guidance.

The second point of the letter addresses the potential complication of bleeding from subcutaneous tissues. Based on our experience in > 100 cases, the careful blunt dissection down to the pretracheal fascia allows careful navigation and displacement of blood vessels and the thyroid isthmus. This technique, therefore, when performed by a surgeon, actually prevents inadvertent damage to local blood vessels, which sometimes may occur when blindly inserting a cannula from the skin surface directly into the trachea. In our series, we had only one case of small but persistent bleeding from subcutaneous tissues that required revision in the operating theater. We did encounter in two cases a larger blood vessel that was detected while performing blunt dissection. This finding led us to abort the procedure and continue by conventional surgical tracheostomy. In these cases, performance of the conventional percutaneous tracheostomy would most probably have led to significant bleeding.

As for the theoretical danger of infection, we believe that infection in this setting usually originates from the contaminated airway and not from skin. A larger incision allows for adequate drainage, while snug closure of the skin around the cannula may actually even predispose to infection. Indeed in our series there were no cases of soft tissue infection that required additional drainage.