considerable number—80% (46/57)—of patients without PTB would still be isolated. In addition, other important parameters like history of contact or purified protein derivative status were obtained but not included as predictive factors.

Contrary to what was stated, there has been a previous study by Scott et al. whereby they considered the clinical, demographic, and radiographic characteristics of patients at risk for PTB in an attempt to predict which patients will have active disease. Although they arrived at the same conclusion that a documented history of weight loss and chest roentgenogram are of value in determining which patients have active PTB, the same did not hold true for the presence or absence of cough.

Incidentally, we noticed that 0.45% NaCl solution was used for sputum induction. We have observed from our previous study that 3% NaCl solution gives a better yield both in terms of quantity and AFB positivity when compared with the 0.45% NaCl solution.3 We believe that in spite of the efforts of Cohen et al to predict which patients need not be isolated, in areas with high prevalence of PTB, the decision should still be individualized. The goal of selectively isolating only patients with active PTB is commendable, but for practical purposes, it is probably unreachable.

Rogelio M. Co, MD, and William A. Ankobiah, MD, FCCP, Mycobacterial Services, Interfaith Medical Center, Brooklyn, New York

References
5 Ankobiah WA, Co R, Soriano C. Improved sputum induction technique increases the yield of pulmonary Mycobacteria tuberculosis [abstract]. Chest 1994; 106(suppl):38S

To the Editor:

Drs. Co and Ankobiah raise some interesting criticisms in their letter. Those of us who practice in hospitals with large populations at risk for tuberculosis (TB) and few isolation rooms are forced to make difficult decisions on a daily basis. We do not have the financial resources to isolate every high-risk patient, and we must be selective. The goal of our research on the clinical presentation of patients at risk for TB is to improve the accuracy of this selection process. The discovery of clinical parameters that identify patients at high risk for smear-positive TB would be most helpful, allowing isolation of the most infectious patients.

Drs. Co and Ankobiah point out that smear negativity does not necessarily rule out infectious TB. While this is true, we still rely on the smear examination and in general discontinue isolation after three negative smears. We do make exceptions in cases where we have a strong clinical suspicion for TB and a highly suggestive chest radiograph. Drs. Co and Ankobiah (unpublished data, 1994-96) found a small percentage of patients who were smear positive on their fourth or fifth specimen. We did not find this in our study, but we have seen it rarely in our clinical practice. Smear negativity remains the most current and the best surrogate for infectiousness, and it is a part of the recommendations of the Centers for Disease Control on removing patients from isolation.1

History of TB and tuberculin skin-test status were not shown to have predictive value in our study of this very high-risk population.

Drs. Co and Ankobiah mentioned that other investigators have looked at clinical predictors. They mentioned the study by Scott et al.2 These investigators retrospectively reviewed records on a population of 43 patients who have TB over a 69-month period at a low prevalence hospital. They compared these patients with a control population of patients without TB who had a sputum specimen ordered over a 4-month period. The fact that they failed to find cough as a risk factor is not surprising considering their study design. Our study interviewed patients prospectively, and it specifically defined a TB cough as 2 weeks of cough.

We were unable to obtain 3% NaCl from the manufacturer for purposes of this study, but would have preferred using it.

The goal of selectively isolating only patients with active TB may be "unreachable," but research that leads to better guidelines or a TB-risk score would be of great help on the front lines. Practitioners could better judge which patients have the greatest risk for transmission and appropriately use limited isolation resources.

Robert A. C. Cohen, MD, and Shirin Muzaffar, MD, Division of Pulmonary, Medicine/Critical Care, Cook County Hospital, Chicago

REFERENCES
1 Centers for Disease Control and Prevention. Guidelines for preventing the transmission of Mycobacterium tuberculosis in healthcare facilities. 1994; 43(RR-13):30

Intractable Hiccups

Consider Nebulized Lidocaine

To the Editor:

Although hiccups serve no physiologic function, they can be due to a myriad of causes. Unfortunately, the anatomic mechanism remains unknown. Numerous medications have been used to treat intractable hiccups: chlorpromazine, haloperidol, 5,5-diphenylhydrodantoin, valproic acid, carbamazepine, baclofen, metoclopramide hydrochloride, and amitriptyline hydrochloride.1,2 In the early 1990s, IV lidocaine was shown to diminish hiccups associated with methohexitol sodium anesthesis,3 and a case was reported of IV lidocaine effectively treating incapacitating hiccups.4

We present the use of nebulized lidocaine for treating intractable hiccups. Nebulized lidocaine has been used to treat disabling cough.5 The mechanism of action was thought to be the result of anesthetizing sensory or irritated afferents.6

A 58-year-old man with multiple medical problems presented with a 5-month history of intractable hiccups. Medical problems included non-insulin-dependent diabetes mellitus with nephropathy and hypercholesterolemia, compensated congestive heart failure, angina, coronary artery disease, the Hantaan virus, myocardial

To the Editor:

Drs. Co and Ankobiah raise some interesting criticisms in their letter. Those of us who practice in hospitals with large populations at risk for tuberculosis (TB) and few isolation rooms are forced to make difficult decisions on a daily basis. We do not have the financial resources to isolate every high-risk patient, and we must be selective. The goal of our research on the clinical presentation of patients at risk for TB is to improve the accuracy of this selection process. The discovery of clinical parameters that identify patients at high risk for smear-positive TB would be most helpful, allowing isolation of the most infectious patients.

Drs. Co and Ankobiah point out that smear negativity does not necessarily rule out infectious TB. While this is true, we still rely on the smear examination and in general discontinue isolation after three negative smears. We do make exceptions in cases where we have a strong clinical suspicion for TB and a highly suggestive chest radiograph. Drs. Co and Ankobiah (unpublished data, 1994-96) found a small percentage of patients who were smear positive on their fourth or fifth specimen. We did not find this in our study, but we have seen it rarely in our clinical practice. Smear negativity remains the most current and the best surrogate for infectiousness, and it is a part of the recommendations of the Centers for Disease Control on removing patients from isolation.1

History of TB and tuberculin skin-test status were not shown to have predictive value in our study of this very high-risk population.

Drs. Co and Ankobiah mentioned that other investigators have looked at clinical predictors. They mentioned the study by Scott et al.2 These investigators retrospectively reviewed records on a population of 43 patients who have TB over a 69-month period at a low prevalence hospital. They compared these patients with a control population of patients without TB who had a sputum specimen ordered over a 4-month period. The fact that they failed to find cough as a risk factor is not surprising considering their study design. Our study interviewed patients prospectively, and it specifically defined a TB cough as 2 weeks of cough.

We were unable to obtain 3% NaCl from the manufacturer for purposes of this study, but would have preferred using it.

The goal of selectively isolating only patients with active TB may be “unreachable,” but research that leads to better guidelines or a TB-risk score would be of great help on the front lines. Practitioners could better judge which patients have the greatest risk for transmission and appropriately use limited isolation resources.

Robert A. C. Cohen, MD, and Shirin Muzaffar, MD, Division of Pulmonary, Medicine/Critical Care, Cook County Hospital, Chicago

REFERENCES
1 Centers for Disease Control and Prevention. Guidelines for preventing the transmission of Mycobacterium tuberculosis in healthcare facilities. 1994; 43(RR-13):30

Intractable Hiccups

Consider Nebulized Lidocaine

To the Editor:

Although hiccups serve no physiologic function, they can be due to a myriad of causes. Unfortunately, the anatomic mechanism remains unknown. Numerous medications have been used to treat intractable hiccups: chlorpromazine, haloperidol, 5,5-diphenylhydantoin, valproic acid, carbamazepine, baclofen, metoclopramide hydrochloride, and amitriptyline hydrochloride.1,2 In the early 1990s, IV lidocaine was shown to diminish hiccups associated with methohexitol sodium anesthesia,3 and a case was reported of IV lidocaine effectively treating incapacitating hiccups.4

We present the use of nebulized lidocaine for treating intractable hiccups. Nebulized lidocaine has been used to treat disabling cough.5 The mechanism of action was thought to be the result of anesthetizing sensory or irritated afferents.6

A 58-year-old man with multiple medical problems presented with a 5-month history of intractable hiccups. Medical problems included non-insulin-dependent diabetes mellitus with nephropathy and hypercholesterolemia, compensated congestive heart failure, angina, coronary artery disease, the Hantaan virus, myocardial