Finally, we would caution that the use of central venous catheters for aspiration of air from the venous circulation is not controversial, as stated by the authors. In fact, preoperative placement of central venous catheters, and occasionally specially designed multifluid right atrial catheters, in patients who are at risk for air embolism during surgery is routine in anesthesia practice.

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Air Embolism during Attempted Central Line Placement

To the Editor:

The case report of Clance and Glauser,1 which appeared in the August 1991 issue of Chest, states that air entered the central circulation after cannulation of the internal jugular vein during insertion of the guide wire with the patient in the Trendelenburg position. Given the large quantity of residual air seen on the x-ray film after the resuscitation, it would seem that a very large bolus of air must have formed or that air entry continued after the initial bolus. A large volume of air is further suggested by the findings in two animal studies: in one study in dogs weighing 10 to 21 kg, 125 ml of air was required to produce apnea;2 in another study, cardiac dysrhythmia was seen after administration of a bolus of only 1.5 to 2.0 ml of air per kilogram of body weight.3

It is possible that the patient gasped with a small initial air embolus, which increased the gradient for air entry into the venous circulation, thus causing a larger bolus of air to follow. However, one would expect to see evidence of air in the heart. It is also possible that the patient experienced a "paradoxical air embolism,"4 wherein a small quantity of the air that entered the venous circulation passed through to the heart and traversed a patent foramen ovale, atrial septal defect, or ventricular septal defect producing coronary or cerebral arterial air embolism and therefore cardiorespiratory arrest. This is possible given the data as reported in the case and the lack of information concerning the condition of the patient after this event.

The therapeutic approach suggested by the authors is confusing. Cardiopulmonary resuscitation (CPR) was the only option given the situation facing the authors. Establishing central venous access and aspiration of air should also be considered during supine CPR. The use of the left lateral decubitus position, in our experience, is practical only if cardiovascular collapse has not already occurred. If the left lateral decubitus position is used, an attempt should be made to aspirate air from the venous circulation to prevent air entry into the heart.5 In a comparison of resuscitative techniques, Alvaran et al6 have demonstrated a shorter resuscitation time (2.7 min) with intracardiac aspiration of air as compared to left lateral decubitus positioning (19.5 min) and cardiac massage (19.3 min).

Apical Pneumocystis carinii Pneumonia Associated with HIV Infection

To the Editor:

We read with interest the report by Shin et al7, which appeared in the November 1991 issue of Chest. They described the radiologic appearance of apical Pneumocystis carinii pneumonia mimicking tuberculosis in two patients with AIDS. Although radiologically documented apical presentations of Pneumocystis pneumonia have been reported,8 these have occurred in patients receiving inhaled pentamidine prophylaxis, which was thought to have affected the radiologic picture.

We, too, have recently had the opportunity to treat a patient who presented with cavitary apical infiltrates suggesting tuberculosis on chest roentgenography and on chest computed tomography (CT), which subsequently proved to be due to P carinii infection.

A 52-year-old woman with no relevant past medical history was admitted to our hospital with a febrile illness characterized by a nonproductive cough and dyspnea. The chest x-ray film (Fig 1) and CT scan of the chest showed apical infiltrates with cavitation and pleural involvement suggestive of tuberculosis. The complete blood cell count and blood chemistries were normal. Fiberoptic bronchoscopy was performed with biopsy of the upper lobes and bronchoalveolar lavage (BAL) of the right middle lobe. The biopsy and BAL specimens both revealed Pneumocystis pneumonia. The patient was treated with trimethoprim-sulfamethoxazole and recovered uneventfully with no suggestion of tuberculosis on long-term follow-up. Western blot analysis of her blood showed positivity for HIV type 1, with 58 total CD4 helper cells.

We report this case to augment the report of Shin et al7 and to suggest that this radiologic presentation of P carinii pneumonia in untreated AIDS patients may be more common than has been previously appreciated. In addition, this presentation of Pneumocystis pneumonia does not imply any form of coinfection. Although radiologic involvement was limited to the upper lobes in our patient,