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A Modified Outer Cannula Can Help Thoracentesis After Pleural Biopsy

To the Editor:

When a pleural biopsy is performed, the thoracentesis is made with the outer cannula of the pleural biopsy needle. The two types most frequently used are Cope’s1 needle and Abram’s2 needle; both have been shown to have the same efficiency.3 During thoracentesis, the negative pressure can cause the aspiration of lung tissue, resulting in obstruction of the distal hole of the outer cannula and interrupting the drainage. The change in the position of the outer cannula does not always help to prevent this phenomenon.

We have proposed a modification in the outer cannula of Cope’s needle to solve this problem. Four holes, diametrically opposed, each one 1 mm in diameter and located 2.5 mm from the distal extremity, are made around the outer cannula (Fig 1). These extra holes allow drainage even when the distal hole is obstructed.

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Oxygen Desaturation With Treatment With Inhaled Nitric Oxide for Obstructive Shock due to Massive Pulmonary Embolism

To the Editor:

We read with interest the report by Böttiger and coworkers (October 1996).1 Nitric oxide (NO) inhalation has been shown to improve gas exchange in patients with adult respiratory distress syndrome and other diseases accompanied by pulmonary hypertension and hypoxia.2,3 Still, unexpected toxicity remains a problem, and indications and contraindications for NO therapy are ill-defined.3,4 Based on their findings, the authors stated that because of specific reduction of pulmonary hypertension, inhaled NO might be a useful approach in the treatment of patients with acute phase pulmonary embolism (PE). We wish to describe, however, oxygen desaturation after NO inhalation in a patient with massive PE.

A 20-year-old woman with a history of attacks of shortness of breath for more than 6 months was hospitalized with severe respiratory distress. We suspected PE and confirmed the diagnosis. The perfusion scan showed multiple, large, wedge-shaped perfusion defects, with an estimated defect of 60% of total lung perfusion. Streptokinase at an adequate dosage was administered immediately. Although oxygen was given by face mask (FiO₂ = 0.6), the PaO₂ value reached only 47.3 mm Hg. Due to exhaustion, the patient required intubation and mechanical ventilation, which was performed in the pressure-control mode with a maximal airway pressure of 35 cm H₂O and FiO₂ of 0.8. She developed the clinical picture of obstructive shock with a systemic blood pressure of 80/50 mm Hg and anuria. A right bundle-branch block pattern was noted on ECG. Despite adequate fibrinolysis (plasma fibrinogen level <0.1 g/L after 6 h), she clearly suffered from ongoing obstructive shock. We therefore attempted to decrease the

![Figure 1. The arrow shows the location of the four extra holes in the outer cannula.](image-url)