

Re: Nitrogen washout therapy for pneumothorax

From: YVON CORMIER, M.D.
MICHEL LAVIOLETTE, M.D.
ANDRÉ TARDIF, M.D.
Le Centre de Pneumologie de Laval
Hôpital Laval
2725, chemin Sainte-Foy
Sainte-Foy, Quebec, Canada G1V4G5

Editor.—

When reading a recent article by Drs. Butler and Orłowski,¹ we were surprised to read their statement that “this technique [nitrogen washout therapy] has not been recently reported as useful in the treatment of pneumothorax.” We recently reported that denitrogenation is useful for the prevention of pneumothoraxes after transthoracic needle lung biopsy.² We showed that breathing 100% oxygen before, during, and after needle biopsy reduces both the number and size of pneumothoraxes and, therefore, decreases the need for surgical drainage.

Although our subjects did not have a spontaneous pneumothorax, we believe the mechanism by which oxygen breathing decreased the incidence and size of pneumothoraxes after transthoracic lung biopsy is the same as that which speeds up resorption of spontaneous pneumothoraxes.

References

1. Butler DA, Orłowski JP. Nitrogen washout therapy for pneumothorax. *Cleve Clin Q* 1983; **50**:311–315.
2. Cormier Y, Laviolette M, Tardif A. Prevention of pneumothorax in needle lung biopsy by breathing 100% oxygen. *Thorax* 1980; **35**:37–41.

• *Dr. Orłowski replies.*—

Dr. Butler and I appreciate the letter by Cormier et al concerning their publication which appeared in *Thorax* in 1980. Although their article does not specifically address the treatment of spontaneous pneumothorax with nitrogen washout therapy, it is a nice randomized study demonstrating that the technique is useful for the prevention of pneumothorax in patients undergoing transthoracic needle lung biopsy.

We also agree that the mechanism by which oxygen breathing decreases the incidence of pneumothoraxes

after transthoracic needle lung biopsy is, in all likelihood, the same principle of nitrogen washout that we demonstrated to be of value in selected cases of spontaneous pneumothoraxes.

Nitrogen washout is a well-known scientific principle, which unfortunately, has only gained acceptance slowly as a therapeutic modality or as prophylactic therapy. We hope our papers will result in the increased application of this useful technique.

JAMES P. ORŁOWSKI, M.D.
Assistant Director
Pediatric and Surgical Intensive Care Unit
The Cleveland Clinic Foundation

Re: Congenital anomalies of the lung in the adult

From: HOMAYOON RAHBARI, M.D.
Pinkus Dermatopathology Laboratory, P.C.
P.O. Box 360
Monroe MI 48161

Editor.—

With reference to the review article, “Congenital Anomalies of the Lung in the Adult” by Mehta et al,¹ I would like to call attention to a “congenital pseudo-anomaly” of the lung in the adult. Congenital absence of pectoral muscles is one of the causes of unilateral hyper-radiolucence of the lung field.² Anomalies associated with congenital absence of pectoral muscles include ipsilateral digital anomalies; ipsilateral upper extremity shortening; absence or hypoplasia of the breasts; deficiency of chest and axillary hair and sweat glands; scoliosis; defective changes of ribs, costal cartilages, or intercostal and shoulder muscles; and Sprengel’s deformity. This anomaly can be easily diagnosed clinically by appropriate tests of the function of these muscles.

References

1. Mehta AC, Ahmad M, Golish JA, Buonocore E. Congenital anomalies of the lung in the adult. *Cleve Clin Q* 1983 **50**:401–416.
2. Rahbari H. Congenital absence of pectoral muscles. *Calif Med* 1972; **117**:66–68.