from living dogs were compared with those obtained from the same dogs' lungs following excision, small but systematic differences were observed. Excised lungs contained more gas on deflation at moderate distending pressures and exhibited greater static hysteresis than living lungs. Differences between *in vitro* and *in vivo* results are related to alterations in smooth muscle tension, vascular pressures and alveolar surface-tension properties. (*Wohl, M. E. B., Turner, J., and Mead, J.: Static Volume–Pressure Curves of Dog Lungs In Vivo and In Vitro, J. Appl. Physiol. 24: 348 (March) 1968.*)

PULMONARY FUNCTION Preoperative pulmonary function studies were correlated with the clinical course in 29 patients undergoing pneumonectomy, 26 of them for carcinoma of the lung. It was concluded that significant airway obstruction alone was not an immediate contraindication to surgery and does not preclude long-term survival. Hypercapnia at rest and cardiovascular decompensation were considered strong relative contraindications to pneumonectomy and in this study such patients, with one exception, were not operated upon. (*Karliner, J. S., Connmaraswamy, R., and Williams, M. H.: Relationship Between Preoperative Pulmonary Function Studies and Prognosis of Patients Undergoing Pneumonectomy for Carcinoma of the Lung, Dis. Chest 54: 32 (Aug.) 1968.*)

RESPIRATORY DEADSPACE During long-term mechanical ventilation, patient comfort frequently requires use of large tidal volumes. This can be done without producing excessive hypocapnia by adding an external mechanical deadspace in series with the patient. The present study demonstrates the feasibility of maintaining normal levels of alveolar ventilation during mechanical hyperventilation using this technique. Increases in measured physiologic deadspace were always smaller than the volume of the added mechanical deadspace because of distribution of deadspace gas during inspiration to both perfused and nonperfused alveoli in proportion to their incremental volume change. (*Suwa, K. and Bendixen, H. H.: Change in Pa_{CO_2} with Mechanical Dead Space during Artificial Ventilation, J. Appl. Physiol. 24: 556 (April) 1968.*)

COMPLIANCE IN EMPHYSEMA Patients with severe obstructive lung disease usually reach a stage of deterioration in pulmonary function after which function may remain stable yet symptoms may be progressive. Symptoms in such patients may abate during exercise programs without improvement in pulmonary function. Total compliance was measured in eight subjects with severe emphysema. The mean chest wall compliance was approximately one-third normal and the mean total thoracic compliance half normal. The work of breathing in emphysema may sometimes account for more than 50 per cent of the total oxygen uptake. Dynamic pulmonary compliance at normal respiratory rates is not increased in emphysema. Much of the increase in symptoms may therefore be related to decreasing chest wall compliance. (*Krumholz, R. A., and others: The Compliance of the Chest Wall and Thorax in Emphysema, Amer. Rev. Resp. Dis. 97: 827 (May) 1968.*)

LUNG SCANNING Of 18 subjects with chronic obstructive lung disease, 16 had abnormal lung scans. No diagnostic criteria were drawn from study of the scans, which varied from time to time for the same patient. Frequent discrepancies between pulmonary arteriograms and lung scans were noted. The scan provided information regarding relative arterior–capillary flow; it did not distinguish anatomic from pathophysiologic causes for decreased perfusion. The arteriograms defined the distribution of pulmonary artery branches, but could not be equated with the status of arteriolar–capillary flow. (*Bryant, L. R., and others: Pulmonary Blood Flow Distribution in Chronic Obstructive Airway Disease, Amer. Rev. Resp. Dis. 97: 832 (May) 1968.*)