5 Ravizza AG. Inverse ratio and conventional ventilator settings: a review of respiratory effects [abstract]. Anesthesiology 1983; 59:A523

To the Editor:

We appreciate the comments of Dr. Read. We agree that improvements may be seen over periods of up to 6 h after a change to IRV, but this is quite difficult to document clinically, given the complexity of the physiologic and therapeutic alterations occurring over time in critically ill patients. We investigated three 1-h periods to limit changes in patient status, thereby allowing determination of physiologic changes that can be attributed solely to ventilatory modality.

We found improvement in PaO2 with a decrease in shunt fraction through the use of PC-IRV. The improvement in dead space and oxygenation should allow a reduction in extrinsic PEEP, FiO2, and minute ventilation, which may offset the deleterious reduction in cardiac output that IRV will produce. Both Tharratt et al.1 and Lain and colleagues2 retrospectively found that oxygenation could be maintained with PC-IRV at lower minute ventilatory rates, lower peak pressures, and lower extrinsic PEEP levels when compared with volume control ventilation. However, neither study measured intrinsic PEEP levels ("auto-PEEP"), which may have been equal to or greater than the initial extrinsic PEEP settings and may be as detrimental to cardiac output as extrinsic PEEP. Additionally, oxygen delivery and oxygen consumption values were not determined in either study, and hemodynamic parameters were not measured by Tharratt et al. Lain et al did mention that there was no significant difference in cardiac output; however, only 11 of the 19 patients had pulmonary artery catheters in place, and other hemodynamic indicators were not calculated.

Dr. Read's suggestions that the additional ventilatory manipulations used with PC-IRV can offset the deleterious cardiac effects of PC-IRV deserve further investigation. However, since pressure-controlled ventilation with normal ratios of inspiratory to expiratory time improves arterial oxygenation and oxygen delivery without causing a reduction in cardiac output, it may be the preferred mode of ventilation in patients with severe respiratory failure before resorting to PC-IRV.

Kevin Chan, M.D., and Edward Abraham, M.D.
UCLA Center for the Health Sciences, Los Angeles, California

REFERENCES


Rules of Evidence and Clinical Recommendations on the Use of Antithrombotic Agents

Errata

To the Editor:

We would like to call your readers' attention to two errors in our article,1 which appeared in the supplement to the October 1992 issue of Chest.

In the left-hand column on page 3065, in the second paragraph under the heading "Levels of Evidence," the first sentence should read as follows: "Low false-positive (α) error indicates a positive trial that demonstrated a statistically significant benefit from experimental treatment." The third sentence in that paragraph should read as follows: "Low false-negative (β) error (high power) indicates a negative trial that demonstrated no effect of therapy, yet was large enough to exclude the possibility of a clinically important benefit (i.e., had a very narrow 95% confidence interval, the upper end of which was less than the minimum clinically important benefit, thereby excluding any improvement due to the test treatment)."

Deborah J. Cook, M.D., F.C.C.P., and David L. Sackett, M.D., Department of Medicine, McMaster University, Hamilton, Ontario, Canada

Reprint requests: Dr. Cook, McMaster Univ., 1200 Main St W, Health Sciences Ctr Rm 2C11, Hamilton, Ontario, Canada.

REFERENCE


Is Chest CT Performed Too Often?

We have had very similar experience with computerized tomography to that described by Dr. DiMarco in the April 1993 issue of Chest. (103:985-86). We appreciate his succinct editorial comments, but there is one area of encouragement. Those coin lesions being approached as potential clinical and roentgenographic T1N0M0 neoplasms of the chest have already been evaluated. The T1N0M0 lesion does not require chest CT due to the "unnecessary evaluation of false-positive studies and the delay in diagnosis associated with false-negative studies." Dr. DiMarco outlined the cost and radiation risk of the chest CT, but the cost and radiation risk in evaluating false-positive results is alarmingly additive.1

We agree that chest CT often produces "no new clinical information" and "no impact on patient care" when the chest x-ray and previous films are analyzed in conjunction with the patient's history. We are often consulted about a CT result when no effort to create the patient's roentgenographic history has been attempted. We wonder if it is really legitimate for the x-ray report to read, "no old films for compar-