postoperative morbidity is highly significant between the two groups for both pneumonectomy (p<0.01) and lobectomy (p<0.001).

It is difficult to say that all the patients were maximally treated for their COPD before the surgical procedure. Recent cases have been prepared much better than the former ones operated on during and after 1970.

All the same, we would like to state again the aim of our paper, which some readers did not seem to understand clearly. It was not meant to deny the value of predicted FEV1, calculation, but to discuss the reasons for its inaccuracy in 23 percent of our patients.

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Vectorcardiography and COPD

To the Editor:

I have read with great interest the article of Lebowitz et al.1 The authors state firmly the validity of the vectorcardiographic examination (VCG) to evaluate the cardiovascular consequences of chronic obstructive pulmonary disease (COPD) and show several changes related to it.

I’d like to commend the detailed description of the data they obtained in their study, as well as the complete and careful statistical analysis presented by the authors. All this leads, in my opinion, not only to valuable conclusions from an epidemiologic point of view, but also to useful criteria for the clinician to improve and make easier the early diagnosis of COPD and of the associated changes in the pulmonary circulation and in the right side of the heart, and even the risk of developing these problems.

However, I would like to point out that a VCG parameter is omitted which, in my opinion, is very efficient for detection of overload/hypertrophy of the right ventricle. Furthermore, it can be easily measured and quantified, which is why it seems especially appropriate to analyze VCGs of great population samples, as was the case with the study of Lebowitz and coworkers.1

I am referring to the measurement of the different quadrants of the three planes (frontal, horizontal, and right sagittal) of the VCG as a percentage of the total area of each planar projection and, more specifically, of those which explore the terminal rightward QRS forces. They are easy to obtain and estimate, and their ability to detect early right ventricle hypertrophy have been emphasized by several authors** who have pointed out a good correlation with mean pulmonary artery pressure (MPAP) at rest.

My own results, included in my doctoral dissertation,5 show that the percentage of the QRS loop area contained in the largest VCG quadrant right posterior of the H-plane (H3), or right inferior of the F-plane (F2) or right anterior of the H-plane (H2) (provided that its value is bigger than 15 percent of the respective area), has a very good correlation (r = 0.496, p<0.01) with the values of MPAP at rest in a series of 30 chronic respiratory patients. In this series, the VCG criterion "H3/F2/H2 (the greatest of them)>15 percent of the total area" identified patients with elevation of the resting MPAP (greater than 18 mm Hg) with a sensitivity of 94.5 percent and specificity of 75 percent.

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Theophylline Administration

How Often Is Often Enough?

To the Editor:

The relationship of the effect of theophylline to serum concentration has been extensively reviewed in multiple previous publications.1-4 The manuscript by Mangura et al describes mean (± SEM) serum theophylline concentrations that ranged from 7.4±1.2 to 15.5±1.6 μg/ml from a theophylline formulation administered once daily, while concentrations following twice daily administration of another formulation ranged from 10.6±1.6 to 12.7±2.2 μg/ml. The authors concluded that the 110 percent fluctuation of the mean serum concentration (mean peak 2.1 times higher than mean trough) during administration of the once daily formulation was comparable to the 20 percent fluctuation (mean peak 1.2 times higher than mean trough) during the twice daily dosing and that theophylline may be administered as a single daily dose agent. Without disputing the authors’ assertion that theophylline may be administered as a single daily (or weekly, or monthly) agent if a prescriber wishes, I can only wonder what magnitude of difference in fluctuation the authors would have considered unsupportive of this conclusion.

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References

2 Chou TC, Masangkay MP, Young R, Conway GF, Helm RA. Simple quantitative vectorcardiographic criteria for the diagnosis of right ventricular hypertrophy. Circulation 1973; 48:1392-67
5 Conget F. Analisis cuantitativo de diversos cuadrantes del vectorcardiograma en la valoracion del crecimiento ventricular derecho y de la presion arterial pulmonar en reposo, en enfermedades respiratorias chronicas. Zaragoza, Spain: Universidad de Zaragoza, 1983

References


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