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Letters

Finding ECG Readers in Clinical Practice

Is It Time to Change the Paradigm?

The standard 12-lead electrocardiogram (ECG) is the most commonly performed cardiac diagnostic test because it provides vital information about cardiac rhythm, acute myocardial injury, and a host of other abnormalities while also being simple to perform, risk free, and inexpensive. Historically, ECG readers have been trained in cardiology and clinical electrocardiography. However, mentoring of cardiology trainees in clinical electrocardiography has been superseded by a host of emerging diagnostic and treatment modalities such as invasive procedures, imaging techniques, cardiac device therapies, and cardiogenomics. As a result, there is an ever-shrinking pool of cardiologists who have the expertise or desire to read ECGs. In the United States, most ECGs are read by noncardiologists (emergency, internal-medicine, and family-practice physicians) who have had minimal training in clinical electrocardiography (1). Inadequate training of ECG readers has also led to an overreliance on computerized measurements/interpretations that are frequently inaccurate.

In some hospitals, there is already an inadequate supply of ECG readers, and the problem is made worse by minimal reimbursement from payers. The small professional fee to a physician for reading an ECG (about \$9.00 in the San Francisco area) has forced some hospitals to augment the professional fee at the hospital's expense in order to find enough readers for the large volume of ECGs generated each day.

The relevant question is whether it is time to consider training and certifying cardiovascular nurse practitioners to read ECGs, thereby supplementing the shrinking pool of expert ECG readers. Cardiologists have confronted similar challenges in the past. For example, at the initiation of coronary care units, cardiologists delegated arrhythmia interpretation to specially trained coronary care unit nurses (2,3). We believe that it is time to consider training and certifying nurse practitioners specializing in cardiology to read ECGs.



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Effect of Spironolactone in CV Mortality in Hemodialysis Patients



Matsumoto et al. (1) have investigated the role of spironolactone in hemodialysis patients. The investigators have noted that spironolactone reduced the risk of both cardiovascular morbidity and mortality in hemodialysis patients. It would be interesting to know the left ventricular mass index and left ventricular ejection fraction in the study population because these 2 parameters have been demonstrated to be objective variables predictive of adverse cardiovascular outcomes in patients with end-stage renal disease (ESRD). The improved cardiovascular outcomes could have been due to an improvement in the aforementioned parameters (2). It would also