CARDIAC MONITOR TO SCREEN FOR CHAGAS

HEART DISEASE

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In a recent survey, we employed a battery-operated cardiac monitor an oscilloscope to screen large numbers of persons for with electrocardiographic abnormalities. To assess the accuracy of this approach, we examined 622 outpatients in a teaching hospital in Tegucigalpa with both the cardiac monitor and a conventional electrocardiograph. Compared to the electrocardiogram (ECG), the sensitivity and specificity of the cardiac monitor was high for complete right bundle branch block (complete RBBB) (k=0.88) and ventricular extrasystoles (VEs) (k=0.95), the ECG abnormalities most frequently associated with Trypanosoma cruzi infection. Sensibitivity and specificity were lower for other findings such as ST and T wave alterations (k=0.24). In a field survey of 3.898 persons living in rural Honduras, the cardiac monitor proved to be a reliable, rapid and efficient means of identifing persons with electrocardiographic abnomalities of Chagas disease. Because of the relative specificity of complete RBBB for Chagas heart disease and its occurrence in up to 15-20% of adults infected with T. cruzi, cardiac monitoring offers an inexpensive alternative to serologic testing for rapid screening of populations for the presence of T. cruzi infection

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