

呼吸对心电图QRS波形的影响

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通过对20例健康男性Frank导联心电图在不同呼吸阶段的QRS波波形平均和振幅统计, 观察到处于不同呼吸阶段的QRS波的振幅有差别。其中QRS波的振幅在呼气中期最高在吸气中期最低, 根据呼吸运动时肺容积及肺内压变化的规律, 认为是由于胸腔压力和心室舒容积的改变, 而不是心脏与电极间的相对位置的改变造成了QRS波振幅的变化。

THE INFLUENCES OF RESPIRATION ON THE QRS IN ELECTROCARDIOGRAM

By the statistic analysis of Frank lead ECG of 20 healthy normal male subjects, it was found that the amplitudes of the QRS complex were different between the respiration phases. Since the most significant difference happened between the middle phase of expiration and the middle phase of inspiration, this result implies that it is the intrapulmonary pressure and the cardiac volume, but not the relative position of the heart and electrodes, which cause the variation of the amplitude of QRS complex.

关键词

心电图(Electrocardiogram); 波形变异(Variability of waveform); 呼吸(Respiration)