Dispersione della refrattarietà atriale e frequenza cardiaca nell'uomo.

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PAROLE CHIAVE: DISPERSIONE DELLA REFRATTARIETÀ, ATRIO, FREQUENZA CARDIACA
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Classically, heart rate has been said to affect the uniformity of atrial refractoriness. However, this statement is based on data from animals while recent research suggests that it is not true for humans. Thus in order to better clarify this problem we measured effective (ERP) and functional (FRP) refractory periods at four sites of the right atrium (high-lateral, mid-lateral, low-lateral and mid-septal) in 12 normal subjects (mean age 60 ± 7 years) at six driven frequencies (70, 80, 90, 100, 110, 120 beats/min.). Twice thereshold stimuli were applied at each site. Dispersion (D) of refractory periods was defined as the maximum difference of the four refractory periods measured in each subject at each driven frequency. Analysis of variance indicated that both D of ERP (F = 0,17, N.S.) and D of FRP (F = 0.05, N.S.) are not functions of heart rate. This different conclusion could be explained considering that data from animals were obtained avoiding the influence of the autonomic nervous system and testing a range of frequencies not usually observed in man. However another possible explanation should be considered. It is possible that atrial pacing in itself is not able to modify D which could be modulated by other factors (e.g.: autonomic mediators) which contemporaneously modified heart frequency. These factors could also act in the presence of a paced rhytham. This hypothesis should be borne in mind when considering the continually debated problem of prevention of supraventricular tachyarrhythmias by atrial pacing.