STUDY OF RELATIONSHIP BETWEEN THE ECG COMPONENTS AND SOME ANTHROPOMETRIC MEASUREMENTS

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The study was conducted on 51 healthy male volunteer students in March 2008. The volunteers were taken from the various departments of Punjabi University, Patiala. All volunteers were adults within the age range of 18–23 years with no vascular abnormalities. All the anthropometric and ECG measurements were carried out under controlled conditions in quiet air-conditioned room with temperature and humidity levels controlled at 23 ± 2°C and 55% ± 5%, respectively, using standard equipments and techniques. It was concluded that body weight is positively correlated to QRS duration ($r=0.284$, significant at 5%), it means that over weight were more prone to develop aberration in the ventricular depolarisation and blocks in the ventricular conduction system. It is also examined that greater BMI has shifted the electrical activity of repolarisation of the ventricles to the left (BMI is negatively correlated to the direction of ventricular repolarisation). It was also observed that weight has shown correlation with QRS duration. Maximum heart rate has shown positive correlation with P-axis (0.332), T-axis (0.299) and QTC interval (0.41) and negatively correlated with QT interval (0.632).