

Electrocardiographic modifications in hypertensive patients without associated diseases

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Introduction: Electrocardiographic changes are present in hypertensive patients without other associated diseases.

Objective: To identify the electrocardiographic changes present in hypertensive patients without associated diseases.

Methods: An analytical study comparing two groups (28 Hypertensive patients without associated diseases vs 14 healthy patients), 12 lead surface electrocardiograms were practiced to both group, blood pressure was measured also. P and QRS waves were measured and calculated their dispersions. QT and JT interval were measured and calculated their dispersion too.

Results: Comparing the maximum P-wave means in both groups were significantly higher in the cases group, behaving similarly when P wave dispersion was compared in both groups. Maximum corrected QT interval ($471,75 \pm 32,04$ vs $448,36 \pm 40,84$; $p=0,020$) and their dispersion ($97,86 \pm 31,73$ vs $96,36 \pm 53,07$; $p=0,522$) were realated too, but only the first one showed significant differences between both groups. Maximum QRS wave and it dispersion showed significant differences when both groups were compared; hypertensive group showed higher value of QRS duration ($116,07 \pm 16,41$ vs $101,43 \pm 5,35$; $p= 0.003$) and dispersion ($44,64 \pm 19,72$ vs $30,71 \pm 6,16$; $p=0.033$). It is the first time that this variables were studied in hypertensive patients. The maximum JT segment and it dispersion did not show to be significantly different when comparing both groups.

Conclusions: Maximum P and QRS waves and their dispersions showed significant differences between both groups. QRS duration and its dispersion were higher in hypertensive people, perhaps it could be related with some conduction disturbances through the conduction system or myocardial muscle.

Key words: electrocardiograms, hypertensive patients, myocardial muscle.