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Prevalence of arrhythmias in heavy vehicle drivers

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ABSTRACT

Objective: In our study we aimed to determine the frequency of arrhythmias that we believe may affect driving safety. Methods and Results: Two hundred drivers were randomly selected from the heavy vehicle driver population (82 bus and 118 truck drivers, p = 0.08, q = 0.92, N = 1200, a = 0.01, d = 0.045). A questionnaire was completed via face to face interviews with the individuals including questions about their personal socio-demographic characteristics and symptoms for arrhythmias. An electrocardiography (ECG) was taken of the study participants using the Cardioline Delta 3 Plus Digital ECG machine. The cardiologist at the clinic evaluated the questionnaire and ECG for presence of arrhythmias. When indicated, ambulatory electrocardiography (Holter Monitoring) was performed for 24 hours in 133 individuals (71 driver and 62 control). In cases that had Holter examination; ventricular ectopy was identified in 25.4% and 22.6%, and supra-ventricular ectopy in 45.1% and 35.5% in the driver and the control groups; respectively. Ventricular tachycardia was detected in 2 patients. Arrhythmia frequencies were 59.1%, 54.8% and 57.1% in drivers, control and both groups respectively. Statistical differences between drivers and control group for rhythm disorders were not detected. Conclusions: Arrhythmias with lethal and devastating potential; need to be diagnosed and treated in professional drivers with extreme caution. The follow up and screening for heart diseases has a crucial role in preventing accidents and occupational diseases in drivers.

KEYWORDS

Arrhythmia; Supra-Ventricular Ectopy; Ventricular Ectopy; Drivers; Prevalence

Cite this paper

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