# Distribution of Pauses, Ventricular and Supraventricular Runs During Night Sleeping Time Interval

**Nikola Kostic**<sup>1</sup>, Milos Kostic<sup>2</sup> <sup>1</sup>Cardiology Department, Health Center Gracanica, Serbia <sup>2</sup>Medical Department, Velefarm, Serbia

### **Introduction:**

Using 24 hour ambulatory electrocardiography device (Holter EKG) is offering possibility to found any EKG event during recording time. It is especially important during sleeping time.

### Aim:

Aim of this study is discovering distribution of pauses longer than 2 seconds, ventricular and supraventricular runs during night sleeping time, and their comparison.

### Methods:

We follow up all pauses longer than 2 seconds, ventricular and supraventricular runs in patients with different cardiology disorders, who were examined with 24 hour Holter EKG (type WelchAllyn PCH 100). Analyzed time was night sleeping interval. Study includes time period from 2011-2012, and was enveloped in Cardiology department of the Health Center in Gracanica (Serbia).

### **Results:**

Among 525 examined patients was 311 females (59,24%) and 214 males (40,76%). Counting total number of ventricular runs events 78,81% was detected during night sleeping time, mostly in 1 AM, dominantly in males. If we count number of patients with ventricular runs, 35,29 % was detected during sleeping time interval, mainly in 1 AM.

Considering total number of supraventricular runs events - 50,9% was detected during night sleeping time, mostly in 2 and 3 AM, in the main in female group. If we count number of patients with supraventricular runs - 45,66 % were discovered during night sleeping time interval, also dominantly in females and basically in 3 AM.

Pauses were mostly distributed during investigated time -70,06%, if we count number of patients, mostly in 5 AM, and in male group. If we consider complete number of recorded pauses - 92,01% were found during sleeping time interval, mostly in 2 and in 4 AM.

## **Conclusion:**

Ventricular runs and pauses are dominantly happened during night sleeping time period, dominantly in males. On the other side, supraventricular runs are more common in female group and approximately have same distribution during awaked and sleeping time.