

## P-72 - THE INFLUENCE OF SINGLE DOSE OF METHADONE ON THE QT VALUE IN PATIENTS FROM THE SUBSTITUTION PROGRAM

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**Introduction:** Methadone treatment may cause prolongation of QT/QTc.

**Aims/ objectives:** This study aims to assess the impact of a single dose of methadone on the value of the QT in the patients from the substitution program.

**Methods:** Participants: 37 people (10women and 27men) treated with methadone in the substitution program. The average age of respondents was 35±9 years old (min.21, max.59), the mean time of addiction 16±8 years, mean dose of methadone was 80±18ml. The control group: 17 patients (6men and 11women), healthy, non-addicted to drugs. The average age of group was 29±6 years. QT and QTc (ECG) were measured automatically. The study was performed before and about 60minutes after the administration of a single dose of methadone.

**Results:** There is a statistically significant difference between QTc values before and after the administration of a single dose of methadon ( $p=0.006$ ). Comparison of the average increase in QTc values in each group, showed that the patients taking methadone up to 70ml (15.21ms) had the highest increase, and those receiving a minimum of 90ml (4ms) had the lowest increase.

It was found that the QTc value is statistically significantly greater in patients after the intake of methadone ( $p = 0.048$ ). The average QTc value obtained in these groups differed by 16.13ms.

**Conclusions:** The analysis of the occurrence of statistically significant differences of QTc values before and after the administration of a single dose of methadone shows that methadone causes QT prolongation in the ECG in opioids addicted patients from the substitution program.