Prevalence of acute pain intensity and evaluation of risk factors after elective Percutaneous Coronary Intervention in Hospital of Lithuanian University of Health Sciences Kaunas Clinics

HOSPITAL OF LITHUANIAN
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**KAUNAS
CLINICS**

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Background and Goal of Study:

Acute pain after Percutaneous Coronary Intervention (PCI) is underestimated problem, which has a lack of attention. In this study we report the prevalence and risk factors for acute pain after PCI procedure.

Materials and methods:

The data of randomly selected patients who underwent elective PCI using transradial or transfemoral approach in Hospital of Lithuanian University of Health Sciences Kaunas Clinics Cardiology department from March to April of 2015 were collected. Patients were questioned according to survey made by authors. Pain intensity was evaluated according to verbal analogue scale after 2, 12, 24 and 48 hours after PCI. Data analysis was performed with SPSS 23.0, ($p < 0.05$).

Results:

This study includes 191 participants.

Factors that statistically significantly affect the manifestation of acute pain are **arterial hypertension** (OR 2,39 (95% CI 1,17-4,89)), **female gender** (OR 2,14 (95% CI 1,16-3,93)), **hematoma** (OR 3,45 (95% CI 1,75-6,82)), **arterial bleeding** (OR 5,33 (95% CI 1,50-18,97)).

Pain severity and nature varied during these time periods (Figure 1,2).

Fig. 1 Pain severity variation during 48 hours after PCI

Fig. 2 Pain nature variation during 48 hours after PCI

Conclusion:

This study revealed that more than half patients after PCI are suffering from acute post procedural pain. In most cases pain was moderate. Arterial hypertension, female gender, hematoma and arterial bleeding are statistically reliable causes for acute pain manifestation after PCI during first 48 hours.

References:

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