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

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Background and Goal of Study:

Chronic pain is severe complication after Percutaneous Coronary Intervention (PCI). Our study report the prevalence and predisposing factors of chronic pain that lasts more than three months after PCI.

Materials and methods:

The data were collected of patients who had underwent elective PCI using transradial or transfemoral approach in Hospital of Lithuanian University of Health Sciences Kaunas Clinics Cardiology department from March to July of 2015. Patients were questioned according to survey made by authors. We interviewed the patients in hospital and then after one week, one month and three months after discharge from hospital. Pain intensity was evaluated according to verbal analogue scale. We investigated factors that may have influence the development of chronic pain. Analysis was performed with SPSS 23.0. P< 0.05 were used.

Results:

117 participants of 191 were included in follow-up group. There was 74 males (63.25%) and 43 females (36.75%). Patients mean age - 67.3±10.49 year. 92 patients (78.63%) were catheterized through radial artery, 25 patients (21.37%) - through femoral artery. There was no statistically significant relation of the results comparing between these two approaches.

117 participants in follow-up group	After 1 week	After 1 month	After 3 months
	14 patients (11.97%) felt pain	14 patients (11.97%) felt pain	Pain persisted for 5 patients (4.27%)

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

Statistically significant risk factors of the chronic pain was **hematoma** (P=0.047), **body mass index >25** (P=0.025), **patient age ≥65 year** (P=0.024). Other factors had no significant relation with chronic pain after PCI.

Fig. 1 Pain severity variation from 1 week up to 3 months after PCI

After 1 week After 1 month After 3 months

Fig. 2 Pain nature variation from 1 week up to 3 months after PCI

Conclusion:

Chronic pain developed in 4.27% of cases and risk factors were hematoma, body mass index and patient age.

References:

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