Introduction:
In a retrospective study from the Pittsburgh clinic, which analyzed survival data from 591 patients admitted to a hospital with a cardiac arrest outside the hospital, it was found that patients with opioid overdose showed significant improvements in neurological status when discharged from the hospital compared with patients who did not receive opioids [Elmer J. et al., 2015].

Methods:
After local ethic committee approval 190 case-records of patients with cardiac arrest and subsequent resuscitation for the period 2006 - 2017 in the clinic of traumatology and orthopedics in Astana were analyzed. Criteria for inclusion in the study were hospital cardiac arrest, trauma to the musculoskeletal system.

Results:
Out of 190 case-records, 17 (8.9%) patients with out-of-hospital cardiac arrest were excluded. Among all hospital stops of blood circulation, we found only 25 successful CPR (14.5%). Among the patients who were successfully resuscitated, 2 groups were identified: I - 16 patients (64%) who received ketamine or/and opioids before the blood circulation stopped (0-180 minutes); II - 9 patients (36%) who did not receive these medicines. The mean age in group I of patients was 39.1 ± 5.7 years, in group II - 43.2 ± 6.2 years (p> 0.05). Patients of the second group had an average life expectancy of 2.7 ± 0.9 days, with a maximum postresuscitation life of 4 days. Patients of the first group were in the hospital for 17.9 ± 2.1 days (p < 0.05), with a maximum period of 98 days. In the first group, the final neurologic evaluation according to the Glasgow scale was 11.4 ± 2.3 points, while in the second group it was 6.2 ± 1.2 points (p < 0.05).

Conclusion:
A retrospective analysis revealed a better survival and neurological outcome in patients who received ketamine or/and opioids before circulatory arrest.