

Abstract

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This master's thesis focuses on the consumption of opioid quantities in thermally injured patients. The amount of morphine consumed by patients using patient-controlled analgesia (PCA) was compared with the amount of morphine routinely prescribed to patients as an i.v. infusion. The first group consisted of eight patients with a mean burn severity area (TBSA; %) of 32.71% who were able to actively participate in their pain management with PCA. The second group consisted of eight patients comparable by gender, age, and weight; their mean TBSA was 31.85%. There were no statistically significant differences between the groups. The Chorobopis software and the patient documentation archive helped to make the patients from both cohorts as similar as possible. At the time when patients from the first cohort used PCA, the amount of opioids consumed by them was monitored and recorded. The amount of opioids consumed by the second cohort of patients was recorded from the ICU daily record and from the patient's decourse. The hypothesis of the thesis was based on previous studies that reported that PCA does not affect the amount of opioids consumed and if it does, it reduces the amount of opioids consumed. The consumption assessed was divided into three categories, the amount consumed on patients' operative days, the amount consumed on patients' non-operative days, and the sum of all days combined. In the total 63 days observed, the difference in total morphine consumption between PCA patients (3347 mg of opioids) and routinely operated patients (880 mg of opioids) was 1618 mg, which was statistically significant at the $p < 0.001$ level. Such a large difference between the amount of opioids consumed rejects the expected and leads one to reflect on the current management of pain in thermally injured patients.