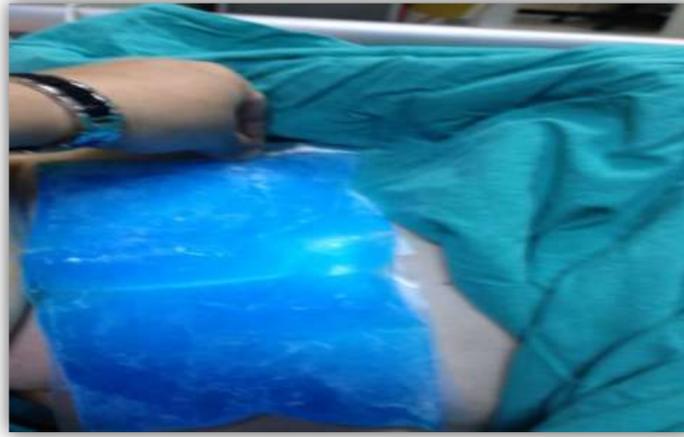


# THE EFFECT OF COLD THERAPY APPLIED TO THE INCISION AREA AFTER ABDOMINAL SURGERY ON POSTOPERATIVE PAIN AND ANALGESIC USE

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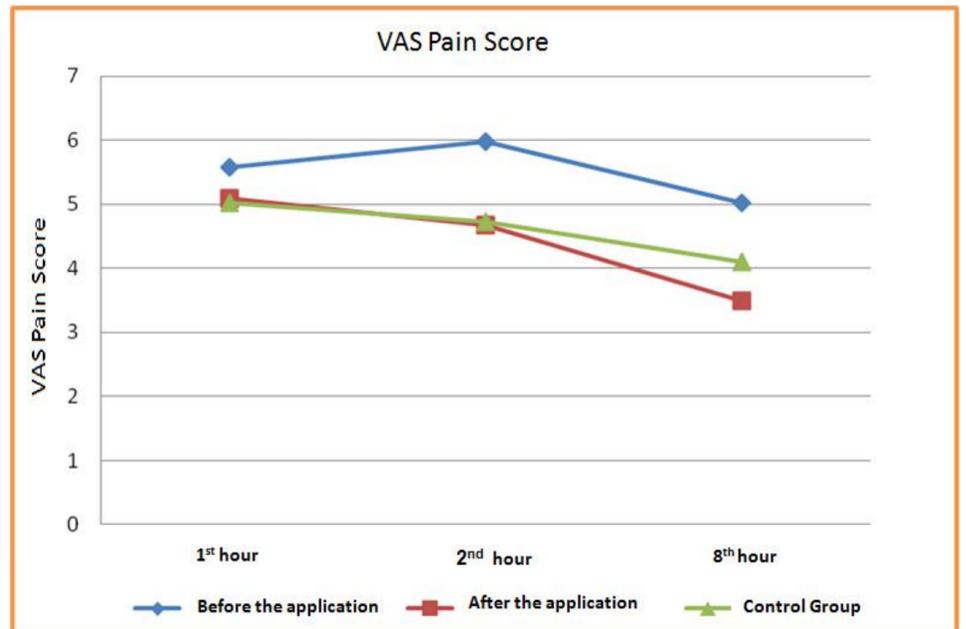
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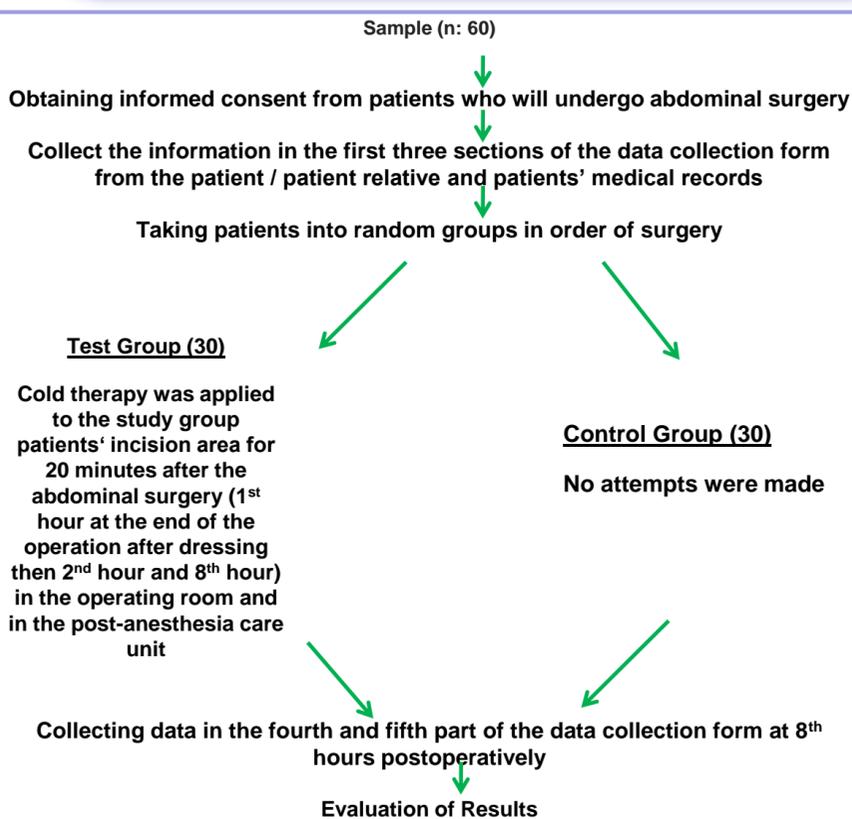
**Objective.** This is a controlled and experimental research is made to analyze the effect of cold therapy which applied to the incision area after abdominal surgery on postoperative pain and analgesic use.

**Methods.** Patient population of the research was made up of the patients who had abdominal surgery between September 2015 – January 2016 in an university-affiliated education and research hospitals' General Surgery, Emergency Surgery and Urology Clinics. The sample of the research is 60 patients (according to the result of power analysis) who had abdominal surgery and who are in conformity with the research criteria and accepted to participate in the research. Data was collected through "Patient Information Form" which is prepared by the researcher to fit for the purpose. Visual Analogue Scale-VAS was used to measure the level of pain before and after cold therapy application and data was saved in Pain Assessment Form and Vital Signs Recording Form.

*In the evaluation of data*, mean, number, percentage in descriptive properties; t test, ANOVA, Pearson correlation were used in parametric data; Mann-Whitney U, Kruskal-Wallis and Spearman Correlation tests were used in non-parametric data; Wilcoxon and Friedman tests were used in evaluating VAS pain measurements.



**Results.** In the research, it was determined that, there were no statistically significant difference between the study and control groups in the VAS pain measurements performed at the postoperative 1<sup>st</sup> hour ( $p > 0,05$ ). In the study group, there was a statistically significant difference between pretreatment and post treatment 2<sup>nd</sup> and 8<sup>th</sup> hours VAS pain level ( $p = 0.001$ ). There was no statistically significant difference in VAS pain level at the pretreatment 1<sup>st</sup>, 2<sup>nd</sup> and 8<sup>th</sup> hours in the study group ( $p > 0,05$ ). There was not advanced significant decrease in the control group ( $p = 0.024$ ), however there was an advanced significant decrease in the pain level from the post treatment 1<sup>st</sup> hour to the 8<sup>th</sup> hour in the study group ( $p = 0.001$ ). There was no statistically significant difference between the study and control groups VAS pain measurements of the patients according to the analgesic used in ( $p > 0,05$ ).



**Conclusions.** Consequently, it was determined that the cold therapy is an effective and safe method of decreased the severity of acute pain in the first 8 hours after abdominal surgery but did not have a statistically significant effect on the analgesic use.

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