

## The effect of lidocaine in reducing pain following Propofol injection (Lipuro%1)

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### Abstract

**Background & Objective:** Propofol is one of the latest anesthetic agent which has many advantages with few side effects in patients. One of the application problems of this drug is pain at the time of injection. Several methods are investigated to reduce the pain, and one of them is the application of Lidocaine together with Propofol.

**Materials & Methods:** This randomized clinical trial study was done in 5th Azar teaching during 2007. 272 patients were selected randomly between age of 15-55 years with ASA Class I,II who were the candidates of elective surgery. We injected Fresenius %1 to the first group with 91 patients, Lipuro %1 to the second group with 90 patients and Propofol drug Lipuro %1 mixed with 20 mg Lidocaine (2 ml of Lidocaine %1) to the third group with 91 patients. Injections was carried out on the supenial vein of dorsal hand. Patients were asked about the severity of pain at the time of injection, 5-10 seconds after %25 of anesthetic induction doze. Data analyzed with using SPSS software and Chi-Square test.

**Results:** The rate (incidence) of pain (Score 1-3) has been 63.91 (%69.2) in the first group, 50.90 (%55.6), and 22.9 (24.2%) in the third group in which there is a significant difference ( $P<0.001$ ). Moderate and severe intensity of pain (Score 2,3) was 42.91 (46%) For the first group, 18.90 (20%) for the second group and 2.91 (2.2%) for the third group ( $P<0.001$ ).

**Conclusion:** On the basis of this study, it is recommended to use lidocaine, at the time of injection, to reduce pain.

**Key Words:** Pain, Propofol, Lidocaine

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