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Comparison of the effect of intranasal morphine and intravenous morphine on post operative pain

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*****Abstract

Background: Control of postoperative paint is one of the most important clinical problem which can present several complications in different organ systems especially cardiovascular and respiratory system.

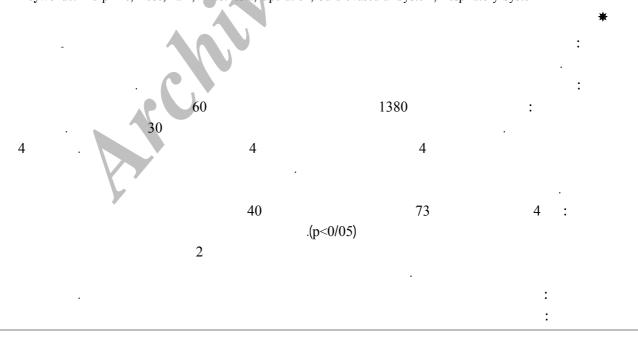
Objective: To compare the effect of intranasal morphine and intravenous morphine on postoperative pain in inguinal herniorrhaphy.

Methods: This clinical trial study was performed on 60 patients who schaduled for inguinal herniorrhaphy at shahid Rajaee hospital in Qazvin during 2001. Patients were divided into two equal groups. In order to control of post operative pain, one group received 4mg intravenous morphine and another group received 4mg intranasally. About 4 hours after operation, patients were investigated for incidence of postoperative pain. Then gathered data were analyzed statistically with comparing the proportion of two groups tests.

Findings: During four hours after operation, 73% of patients in intravenous morphine group and 40% in intranasal morphine group needed for second dose of drug. Thus there was significant statistical difference between two groups (P<0.05). In intravascular group, complications such as nausea, vomiting, pruritis and respiratory depression did not occur in any patients but in intranasal group, two patients developed mild nausea which there was no significant statistical difference between two groups (P>0.05).

Conclusion: Intranasal morphine decreases post operative pain more than intravenous morphine.

Keywords: Morphine, Nose, Pain, Anesthesia, Operation, Cardiovascular System, Respiratory System



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(13/3) (8 5) 2/5) 4 (5 (10 8) .(p<0/05)) (22 3 12 (73/3) 40) $37/17\pm4/1$ (p<0/05) $34/9 \pm 15/1$ 3 1/5 1 4 3/5 61/5 62/5 2 .(p<0/05) 73/3) 22 .(1 40) 12 .(p<0/05) -1 25 20 15 10 5 о о О 0.5 3.5

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1. Miller Ronald. Anesthesia. 5 th ed, Philadelphia Churchill Livingstone, 2000: 280-313, 2324-38

2. Katzung Bertram G. Basic and clinical pharmacology. 7 th ed, Appleton and LANGE, 1998, 496-506

- 3. Hallett A, O' Higgins. F etal. Patient controlled intranasal diamorphine for post operative paint. Anesthesia 2000 Jun; 55(6): 532-9
- 4. Kendall JM , Reeves BC etal. Multicenter randomized controlled trial of nasal diamorphine for analgesia in teenager and children with clinical fracture. BMJ , 2001 Feb; 322 (7281): 261-5

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