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Comparison of effect of anesthesia with halothane and lidocaine on postoperative pain

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*** Abstract**

Background: Pain is a sensory and emotional experience due to tissue damage. Effective pain control precludes various complications in different body systems.

Objective: This study was designed for comparison of lidocaine and halothane anesthesia in postoperative pain on patients undergoing inguinal herniorrhaphy.

Methods: In a randomized, double-blind, clinical trial study 60 male patients between 20-55 years old, undergoing elective unilateral inguinal herniorrhaphy were assessed in Rajaii hospital in 2001. For maintenance of anesthesia halothane (0.5-1.5 MAC) was used for one group. In another group, lidocaine was administered with continuous drip technique (100-120 μ g/Kg/min). Every 2 hours for 8hrs postoperative pain and the incidence of nausea and vomiting were determined and compared. The results were assessed with T and χ^2 tests.

Findings: The mean score of pain for first 2 hours postoperative in lidocaine group was 3.70 and in halothane group was 5.13 and it was meaningful statistically ($P=0.002$). But in next 6hrs, there was no significant statistical difference between two groups. The difference was seen in the number of patients who received pethidine, and the incidence of nausea and vomiting between two groups was not meaningful statistically.

Conclusion: There was no meaningful statistical difference between two groups in most parameters, but due to antiarrhythmic effect and cardiovascular stability of lidocaine and limitation of frequent use of halothane in short period, lidocaine anesthesia can be excellent substitute for halothane anesthesia.

Keywords: Anesthesia, Halothane, Lidocaine, Pain, Operative Surgery

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60

1380

:

(0/5 - 1/5 MAC)

(

120 100)

t

8

2

5/13

3/7

2

:

6

.(p=0/002)

:

-

:

*

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4

MAC 1/5 0/5

4 5 2

100

120 (3 2 1)

500

8) 2

(

) Visual Analogue Pain Score (6 5 4)

5 2/5 2

(8 5

SPSS 1380 60

t

0/05

: *

34/5 ± 12/4

29/7 ± 11/5

± 11/5

54/8 ± 12/7 55/8

0/1)

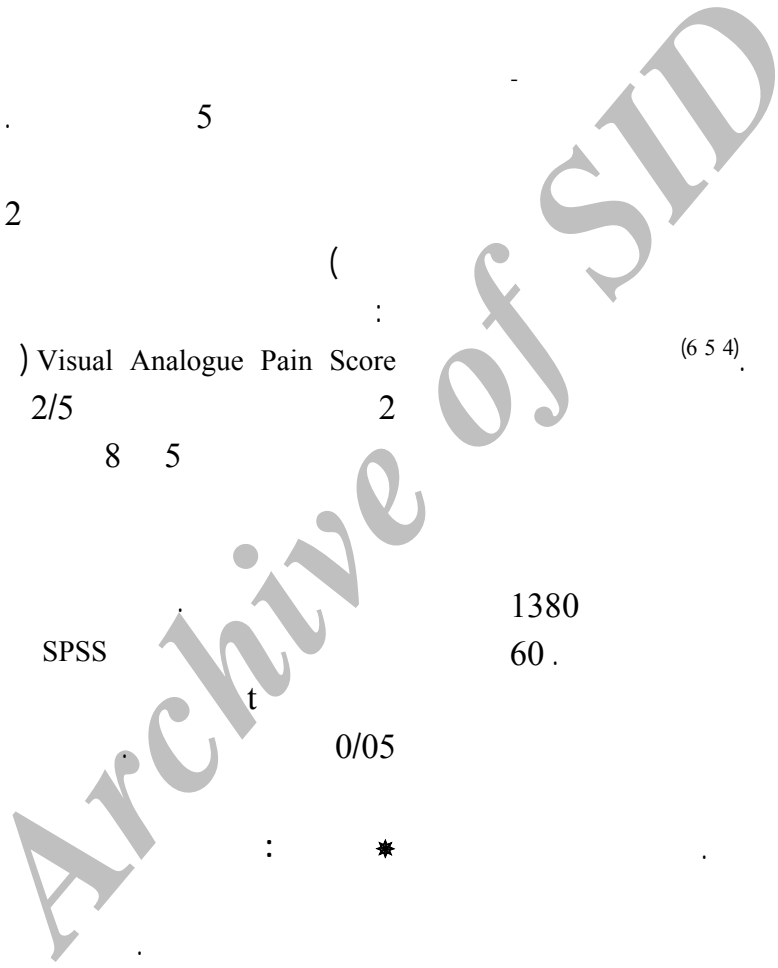
(2

2

3/7

5/13 (5)

1/5



2 (p=0/002)

(1)

6 3

28 10

-1

(30)

8

(5)

2

0/002	3/70 ± 0/84		2
	5/13 ± 1/47		
0/64	4/46 ± 2/30		2
	4/73 ± 2/08		
0/154	2/86 ± 1/25		2
	3/40 ± 1/58		
0/338	1/96 ± 0/89		2
	2/23 ± 1/22		

(1)

21

(50) 15

(70)

± 10

28/34 ± 8/8

29/76

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