

Myprodol®의 코 수술 후 통증에 미치는 효과

김현웅 · 김태만 · 문상우 · 이승수 · 이성민 · 이용훈 · 임영창 · 이정권

Pain Control after Nasal Surgery

Hyun Ung Kim, MD, Tae Man Kim, MD, Sang Woo Moon, MD, Seung Soo Lee, MD,
Sung Min Lee, MD, Yong Hoon Lee, MD, Young Chang Lim, MD and Jung Gweon Lee, MD

Department of Otorhinolaryngology, Yonsei University College of Medicine, Seoul, Korea

- ABSTRACT -

Background and Objectives : Although various analgesics have been administered for postoperative pain control in outpatient nasal surgery, postoperative pain has not been effectively controlled until now. Recently, Myprodol®, a combination analgesics with codein, ibuprofen and paracetamol was developed and used as a new analgesics. This study was performed to evaluate the effectiveness of Myprodol® for postoperative pain control in outpatient nasal surgery. **Materials and Methods :** We studied 40 cases of outpatient nasal surgery, which were composed of 20 cases of septoplasty and 20 cases of ethmoidectomy. We classified 2 groups which consisted of 10 cases of septoplasty and 10 cases of ethmoidectomy respectively. The tiaprofenic acid 1 tablet were administered three times per day for 2 days in the first group postoperatively. The Myprodol® 2 capsules were administered three times per day for 2 days in the second group postoperatively. We evaluated the postoperative pain with Verbal Rating Pain Scores (VRP), Visual Analogue Pain Scores (VAS) and satisfactory scores to pain control. **Results :** Overall, Myprodol®-administered group showed statistically significant better VRP and VAS than tiaprofenic acid-administered group. Satisfactory scores to pain control was higher in Myprodol®-administered group than tiaprofenic acid-administered group, too. **Conclusion :** We conclude that Myprodol® is an effective oral analgesics for postoperative pain control in outpatient nasal surgery. (*J Clinical Otolaryngol* 1999;10:211-216)

KEY WORDS : Myprodol® · Postoperative pain control · Nasal surgery.

서 론

1)2)

: 1999 5 12

: 1999 9 5

: , 120 - 140

134

cyclo - oxy -

: (02) 361 - 8476 · : (02) 393 - 0580

E - mail : JGLee@YUMC.Yonsei.ac.kr.

genase

prostagladin

3)4) 7.2 cc
 4 cc
 가
 codeine 1 48
 가 2 24 1, 48
 가 5) Myprodol® 1
 ibuprofen, paracetamol, Myprodol® 6 (840 mg) 1 3
 codeine 가 가 2 , 2 tiapropanic
 acid(Surgam®) 3 tablet(1800 mg) 1 3
 가 가 2
 가

수술후 통증에 관한 설문지

대상 및 방법
 연구대상 1998 10 1 1998 12 31
 5 , 0 , 1
 , 2 , 3 , 4
 40 VAS 10 cm
 Myprodol® 2 1 0 cm , 10 cm
 10 ,
 2 tiapropanic acid(Surgam®) 48
 VAS
 10 10 cm 100%,
 0%
 가 , 1
 , 2 2
 2

수술 전 처치, 수술방법, 수술 후 약물 투여

1
 dormicum 2.5 mg , atropin su - 술후 Myprodol®과 tiapropanic acid의 부작용에 관한
 lphate 0.5 mg xylocaine(2% 설문지
 lidocaine + 1 : 100,000 epinephrine) Myprodol® tiapropanic acid

통계분석
가
SAS for wind-
ows' program Paired t - test(p<0.05)

rating pain score 1 2
pain score가 가
pain score가
(Table 2, Table 3, Fig. 1). Suh 6)
Ketorolac Tromethamin
My -
가

결 과

인구학적 특성 및 수술시간
1 37 2 32
1 가 11 : 9, 2 10 : 10
가
가 . 1
45 2 40 , 1
20 2 25
(Table 1).

Visual analogue pain score
Visual analogue pain score 1 2
pain score가 2
가 (p>0.05), 4
(p<0.05). Vi -

Table 1. Demographic features and duration of nasal surgery in each study groups

	Group 1	Group 2
Age (Years)	37 ± 10.2	32 ± 11.3
Sex (M : F)	11 : 9	10 : 10
Weight (Kg)	62.5 ± 11.5	59.2 ± 9.7
Height (Cm)	165.4 ± 7.2	163.7 ± 5.7
Duration of op.* (min)		
Ethmoidectomy	45 ± 7 min	40 ± 5 min
Septoplasty	20 ± 5 min	25 ± 2 min

op.* : operation

Verbal rating pain score
Verbal rating pain score 1 2
pain
score가 (p<0.05). Verbal

Table 2. The change of VRP* means with time in septoplasty and ethmoidectomy

Group	Surgery	2 hour	4 hour	6 hour	12 hour	18 hour	24 hour	36 hour	48 hour
1	Septo.†	2.6 ± 0.9	2.1 ± 0.8	2.1 ± 0.7	0.8 ± 0.6	0.5 ± 0.3	0.5 ± 0.4	0.5 ± 0.3	0.4 ± 0.2
	Ethmo.‡	2.7 ± 1.0	2.5 ± 0.8	2.3 ± 0.9	1.1 ± 0.7	0.7 ± 0.5	0.6 ± 0.3	0.5 ± 0.2	0.3 ± 0.1
2	Septo.†	2.8 ± 1.3	2.8 ± 1.1	2.7 ± 0.8	1.5 ± 0.9	1.6 ± 0.7	1.5 ± 1.0	1.3 ± 0.8	1.2 ± 0.9
	Ethmo.‡	3.2 ± 1.1	3.0 ± 0.9	2.9 ± 1.0	1.7 ± 0.8	1.6 ± 1.0	1.7 ± 0.8	1.5 ± 0.7	1.4 ± 0.8

*VRP : Verbal Rating Pain Score †Septo : Septoplasty ‡Ethmo : Ethmoidectomy

Table 3. The VRP* p-value with time in septoplasty and ethmoidectomy

Surgery	2 hour	4 hour	6 hour	12 hour	18 hour	24 hour	36 hour	48 hour
Septo.†	0.03	0.02	0.04	0.005	0.03	0.01	0.007	0.001
Ethmo.‡	0.01	0.03	0.01	0.003	0.001	0.02	0.03	0.003

*VRP : Verbal Rating Pain Score †Septo : Septoplasty ‡Ethmo : Ethmoidectomy

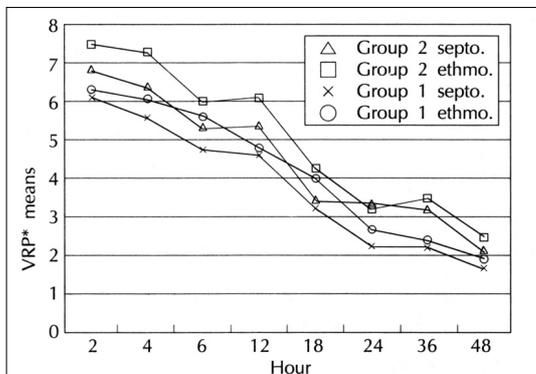


Fig. 1. This figure shows the change of VRP* means with time in septoplasty and ethmoidectomy.

*VRP : Verbal Rating Pain Score

†Septo : Septoplasty

‡Ethmo : Ethmoidectomy

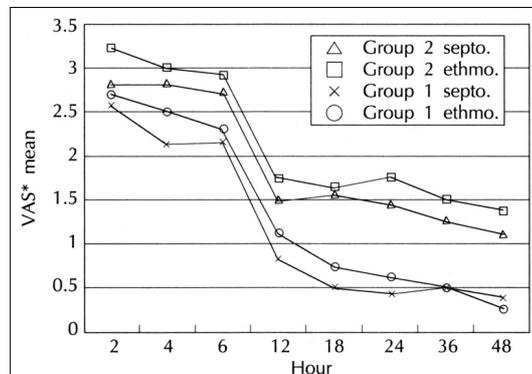


Fig. 2. This figure shows the change of VAS* means with time in septoplasty and ethmoidectomy

*VAS : Visual Analogue Pain Score

†Septo : Septoplasty

‡Ethmo : Ethmoidectomy

Table 4. The change of VAS* means with time in septoplasty and ethmoidectomy

Group	Surgery	2 hour	4 hour	6 hour	12 hour	18 hour	24 hour	36 hour	48 hour
1	Septo. †	6.1 ± 0.8	5.6 ± 1.2	4.7 ± 0.8	4.5 ± 0.8	3.3 ± 1.1	2.3 ± 0.9	2.2 ± 1.1	1.7 ± 0.8
	Ethmo. ‡	6.3 ± 1.2	6.1 ± 1.4	5.5 ± 0.9	4.7 ± 0.9	4.0 ± 1.0	2.7 ± 0.8	2.4 ± 1.0	1.9 ± 0.9
2	Septo. †	6.8 ± 1.2	6.4 ± 1.1	5.3 ± 0.9	5.3 ± 0.8	3.6 ± 1.4	3.3 ± 1.1	3.2 ± 0.8	2.1 ± 0.9
	Ethmo. ‡	7.5 ± 1.4	7.3 ± 0.8	6.0 ± 0.9	6.1 ± 1.0	4.2 ± 1.1	3.2 ± 0.7	3.5 ± 0.9	2.5 ± 1.1

*VRP : Verbal Rating Pain Score †Septo : Septoplasty ‡Ethmo : Ethmoidectomy

Table 5. The VAS* p-value with time in septoplasty and ethmoidectomy

Surgery	2 hour	4 hour	6 hour	12 hour	18 hour	24 hour	36 hour	48 hour
Septo. †	0.25	0.01	0.04	0.01	0.006	0.002	0.004	0.001
Ethmo. ‡	0.07	0.02	0.01	0.004	0.006	0.01	0.02	0.03

*VRP : Verbal Rating Pain Score †Septo : Septoplasty ‡Ethmo : Ethmoidectomy

Table 6. The satisfactory score to pain in each group

Group	Septo. †	Ethmo. ‡
1	65 ± 10.3	71 ± 12.4
2	58 ± 9.3	67 ± 11.5
p value	0.08	0.10

†Septo : Septoplasty ‡Ethmo : Ethmoidectomy

(p > 0.05) (Table 6).

술후 약물투여에 따른 부작용

고 찰

visual analogue pain score

1 2 2 pain score가 가 pain score가

(Table 4, Table 5, Fig. 2).

packing

가

전체적인 통증완화에 대한 만족도

가

1 2

codeine

결 론

Myprodol® tiap -
ropepic acid Verbal Rating
Pain Scores(VRP), Visual Analogue Pain Scores
(VAS),

codeine
Myprodol® 가

중심 단어 : Myprodol®

REFERENCES

- 1) Oden R. *Acute postoperative pain: incidence, severity and the etiology of inadequate treatment. Anesthesiol Cli North Am* 1989;7:1-15.
- 2) Stein C. *Peripheral mechanism of opioid analgesia. Anesth Analg* 1993;76:182-91.
- 3) Annika B, Malmberg MS, Yaksh TL. *Pharmacology of the spinal action of ketorolac, morphine, ST-91, U50488H,*

- and L-PIA on the formalin test and an isobolographic analysis of the NSAIDs interaction. Anesthesiology* 1993; 79:270-81.
- 4) McCormack K. *Nonsteroidal antiinflammatory drugs and spinal nociceptive processing. Pain* 1994;59:9-43.
- 5) Anton JM, Guiseppe DG, Angela LS, Alphonso GHK, Jos K. *Analgesic efficacy and safety of paracetamol-codeine combinations versus paracetamol alone: A systematic review. Bri Med J* 1996;313:321-5.
- 6) Suh KS, Lee GJ, Kim JW, Lee JW, Lee JH, Choi JY. *The effects of premedication on postoperative pain in nasal surgery. Korean J Otolaryngol* 1997;40:1455-61.
- 7) Han TH. *Pain control after dental surgery: Myprodol versus ibuprofen versus codeine. J Korean pain society* 1998; 11:74-80.
- 8) Goodman GA, Rall TW, Nies AS, Taylor P. *Pharmacologic Basis of Therapeutics;1991. p.497-504, 656-9, 665-7.*
- 9) Lownie JF, Lownie MA, Reinach SG. *Comparison of the safety and efficacy of a combination analgesic myprodol and ponstan in the treatment of dental pain. J Den Asso South Africa* 1992;47:403-6.
- 10) Schwellnus MP, Theunissen L, Noakes TD, Reinach SG. *Anti-inflammatory and combined antiinflammatory / analgesic medication in the early management of iliotibial band friction syndrome. SAMU* 1991;79:602-6.
- 11) Solomon RE, Gebhart GF. *Synergistic antinociceptive interaction among drugs administered to the spinal cord. Anesth Anal* 1994;78:1164-72.
- 12) Eisenach JC. *Aspirin, the miracle drug: Spinally, too? Anesthesiology* 1993;79:211-3.
- 13) Souter AJ, Fredman B, Whiteman PF. *Controversies in the perioperative use of nonsteroidal anti-inflammatory drugs. Anesth Anal* 1994;79:1178-90.