

# Myprodol

I.

가

, 3

가

가

, 가

4, 5).

(WHO

Myprodol

Codein

3 ).

phosphate

10mg,

Acetaminophen(Paracetamol) 250mg

Ibuprofen 200mg

Acetaminophen

1).

300mg

cyclosporin

prostaglandin

3

가

가

가

6, 7).

가

2, 3).

가

가 8, 9),  
 Y  
 Myprodol  
 Acetaminophen

(1)  
 1-1 : (n=25)  
 1-2 : Myprodol (n=22)  
 1-3 : Acetaminophen (n=20)

II.

1.

Y

20

67

31 . 1 sextant

Myprodol 1 3 2.

, 1 2

Acetaminophen 1 3 , 1 2

(2)  
 2-1 : (n=10)  
 2-2 : Myprodol (n=12)  
 2-3 : Acetaminophen (n=9)

가

(Table 1).

가

3

30

Table 1. , , ( ± )

	1-1	1-2	1-3	2-1	2-2	2-3
(years)	45.76 ± 10.7	47.73 ± 8.90	47.20 ± 11.01	48.80 ± 13.93	49.58 ± 13.72	47.33 ± 11.30
(cm)	167.36 ± 6.97	166.77 ± 6.87	163.70 ± 7.73	165.30 ± 9.88	164.75 ± 7.91	167.11 ± 10.88
(Kg)	63.76 ± 11.28	64.05 ± 11.51	60.55 ± 6.61	62.30 ± 9.57	59.00 ± 8.08	64.33 ± 8.41
( / )	15/10	13/9	12/8	4/6	5/7	4/5

3.

4.

1. 가  
0 10  
( 1. , 0:  
, 10: 가 ).

2. 1  
0 10  
( 2. 1. 가  
, 0: , 10: 가 ( 1) (Table 2)  
) (1) (1 - 1, 1 - 2, 1 - 3 )

3. 0 가  
10 1.  
( 3. , 0: , 10: Placebo 1 - 1 Myprodol  
가 ) Acetaminophen

4. (5 - ,  
, , ,  
) (Satisfaction. (2) (2 - 1, 2 - 2, 2 - 3  
)

5. ( 2 - 1, 2 - 2, 2 - 3

Table 2. ( 1)

1	2	3
4.08 ± 2.80	5.00 ± 1.57	4.50 ± 2.16
5.20 ± 1.99	4.92 ± 2.11	4.89 ± 2.20

Table 3. 1 ( 2)

1	2	3
2.84 ± 1.99	2.18 ± 1.26	2.90 ± 1.71
3.90 ± 1.45	1.67 ± 1.30	3.56 ± 2.65

\* ; (P<0.05)

Table 4. ( 3)

1	2	3
1.24 ± 1.76	2.82 ± 1.50	1.60 ± 1.54
1.30 ± 1.06	3.25 ± 1.82	1.33 ± 1.32

\* ; (P<0.05)

2. 1 ( 2) (Table 3)

(1) (1-1, 1-2, 1-3 )  
1-1, 1-2, 1-3 , 2  
1-2 < 1-3 < 1-1

Table 5.

	1-1	1-2	1-3
(5)	1/25	6/22	1/20
(4)	1/25	9/22	8/20
(3)	16/25	7/22	11/20
(2)	1/25	0/22	0/20
(1)	0/25	0/22	0/20

(2) (2-1, 2-2, 2-3 ) > 1-3 > 1-1 3 1-2  
2-1, 2-2, 2-3 2 Myprodol 가  
2-1 2-2 가 1-1 1-2  
(P<0.05).

3. (Table 4)

(1) (1-1, 1-2, 1-3 )

Table 6.

	2-1	2-2	2-3
(5)	0/10	6/12	0/9
(4)	2/10	3/12	4/9
(3)	8/10	3/12	5/9
(2)	0/10	0/12	0/9
(1)	0/10	0/12	0/9

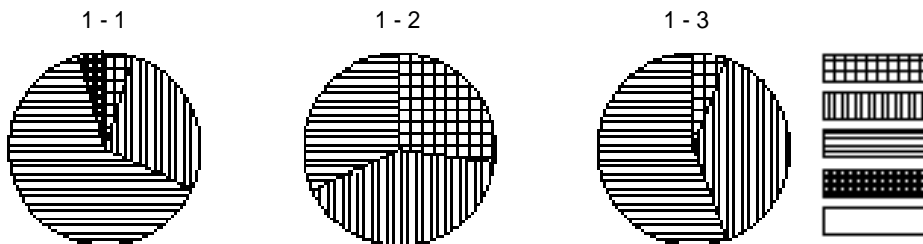


Figure 1.

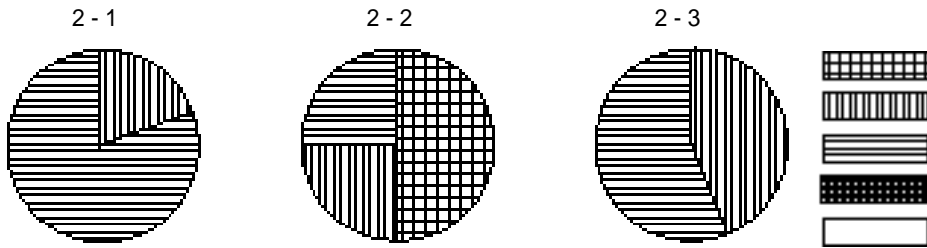


Figure 2.

( $P < 0.05$ ).

(2) (2 - 1, 2 - 2, 2 - 3 )

3 (Difference between Means) 2 - 1 2 - 2 가 2 - 1 2 - 2 , 2 - 2 2 - 3 ( $P < 0.05$ )

4.

(1) (1 - 1, 1 - 2, 1 - 3 ) 1 - 2 > 1 - 3 > 1 - 1 가 1 - 1 1 - 2 . ( $P < 0.05$ ) (Figure 1) (Table 5)

(2) (2 - 1, 2 - 2, 2 - 3

) 2 - 1 2 - 2 2 - 2 2 - 3 가 (Figure 2) (Table 6).

5. (Table 7)

(1) (1 - 1, 1 - 2, 1 - 3 ) 1 - 1 가 2 , 가 1 - 2 , 가 1 - 3 가 2 , 가

Table 7.

( : )

1 - 1	2	2	2	1	0	0	2
1 - 2	1	1	1	0	1	0	1
1 - 3	0	2	2	1	0	0	1
2 - 1	1	0	2	0	0	0	2
2 - 2	0	2	1	2	0	0	1
2 - 3	0	0	1	1	0	0	1

(2) (2 - 1, 2 - 2, 2 - 3 codein 60% 2  
) 가 ,  
2 - 1 가 , 4  
, 2 - 2 ,  
가 , morphine  
2 , 가 13).  
2 - 3 ,  
, .  
Cooper ibuprofen  
가  
IV. 14, 15).  
, codeine  
aspirin  
ibuprofen  
. NMDA 가  
prostaglandin 가  
16).  
Paracetamol aspirin 가  
가  
prostaglandin  
가 10).  
paracetamol aspirin  
17).  
codein aspirin  
Paracetamol Myprodol 가 ,  
paracetamol  
가 ibuprofen,  
가 11).  
Acetaminophen, paracetamol para - codein 가  
3가  
aminophenol , 가  
가  
aspirin , 가  
, 30 1 propacetamol Vlok (1987) chronic  
가 osteo - arthritis  
12). (Ibuprofen 200mg, paracetamol  
250mg, codein phophate 10mg per tablet)

ibuprofen

18)

Solomon Gebhart

, , 1 10

19) Eisenach

ketorolac

가  
1, 2, 3

20)

Lownie (1992)

52

Myprodol

Myprodol Ponstan (Mefenamic acid)

가

가

(

Myprodol

3)

Ponstan 가

7)

(1998)

Myprodol

( 2)  
paracetamol

1

3

가

12). (1999)

가

Myprodol tiaprofenic acid

Myprodol

V.

가

Myprodol  
codeine

Myprodol

Acetaminophen

codeine

21).

1. 가  
1)

(

가

가

2. 가 ( 2) 1  
 가 Myprodol  
 (P<0.05).

3. ( 3)  
 Myprodol Myprodol  
 Acetaminophen 가 (P<0.05).

4. Myprodol 가  
 Myprodol  
 Acetaminophen 가 (P<0.05).

5.

Myprodol

## VI.

1. Oden R: Acute postoperative pain: incidence, severity and the etiology of

inadequate treatment. *Anaesthesiol. Clin North Am*, 7: 1 - 15, 1989.

2. 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 NSAID interaction. *Anesthesiology*, 79: 270 - 81, 1993.

3. McCormack K: Nonsteroidal antiinflammatory drugs and spinal nociceptive processing. *Pain*, 59: 9 - 43, 1994.

4. Anton JM, Guiseppa DG, Angela LS, Alphonso GHK, Jos K: Analgesic efficacy and safety of paracetamol - codeine combinations versus paracetamol alone: a systemic review. *Bri Med J*, 313; 321 - 325, 1996.

5. Morgan J, Francois T, Blanloeil Y, Pinaud M: The efficacy of a nonsteroidal antiinflammatory drug(Ketoprofen) on the Morphine respiratory depression: a double - blind, randomized study in volunteers. *Anesth Anal*, 85: 400 - 5, 1997.

6. Schwellnus MP, Theunissen L, Noakes TD, Reinach SG: Anti - inflammatory and combined anti - inflammatory/analgesic medication in the early management of iliotibial band friction syndrom. *SAMU*, 79: 602 - 6, 1991.

7. 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, 47: 403 - 406, 1992.
8. Cooper SA: Single dose analgesic studies: the upside and downside of assay sensitivity. In: M. Max, R. Portenoy and E. Laska(Eds). Advances in Pain Research and Therapy, Raven Press, New York, 18: 117 - 24, 1991.
  9. Forbes JA: Oral Surgery. In: M. Max, R. Portenoy and E. Laska(Eds). Advances in Pain Research and Therapy, Raven Press, New York, 18: 347 - 74, 1991.
  10. Beaver. WT: Aspirin and acetaminophen as constituents of analgesic combinations. Archives Internal medicine, 141: 293 - 300, 1981.
  11. Laska. M. Sunshine. A & Zigelborm. I: Effect of caffeine on acetaminophen analgesics. Clinical Pharmacology and Therapeutics, 498 - 505, 1983.
  12. Han TH: Pain control after dental surgery: Myprodol versus Ibuprofen versus Codeine. J Korean pain society, 11: 75 - 80, 1998.
  13. Goodman Gilman A, Rall TW, Nies AS, Taylor P: Pharmacol Basis Ther, 11: 497 - 504, 656 - 9, 665 - 7, 1991.
  14. Cooper. SA: Analgesic efficacy of an Ibuprofen - Codeine combination Pharmacotherapy, 2: 162 - 167, 1982.
  15. Cooper. SA: Five studies on Ibuprofen for postsurgical dental pain. American journal of medicine, 77: 70 - 77, 1984.
  16. Sorkin LS: Intrathecal ketololac blocks NMDA - evoked spinal release of PGE2 and TXB2. Anesthesiology, 79: A909, 1993.
  17. Souter AJ, Fredman B, Whiteman PF: Controversies in the perioperative use of non-steroidal anti-inflammatory drugs. Anesth Anal, 79: 1178 - 90, 1994.
  18. Vlok GJ: Comparison of a standard ibuprofen treatment regimen with a new ibuprofen/paracetamol/codeine combination in chronic osteo - arthritis. South African Medical Journal, 1: 4 - 6, 1987.
  19. Solomon RE, Gebhart GF: Synergistic antinociceptive interaction among drugs administered to the spinal cord. Anesth Anal, 78: 1164 - 72, 1994.
  20. Eisenach JC: Aspirin, the miracle drug: Spinally, too? Anesthesiology, 79: 211 - 3, 1993.
  21. : Myprodol . J Clinical otolaryngol, 10. 211 - 216, 1999.

- Abstract -

## Pain Control Effects of Myprodol after Periodontal Surgery and Dental Implant Surgery

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Although various analgesics have been administered for postoperative pain control, postoperative pain has not been adequately controlled .

The purpose of this study was to evaluate the effects and patient's satisfaction of Myprodol (combination analgesics with codeine, ibuprofen, paracetamol) compared to Acetaminophen and placebo drug after periodontal surgery and dental implant surgery.

We studied 98 cases of outpatients which were composed of 67 cases of flap operation(which separated to 3 groups: Placebo group(n=25), Myprodol group(n=22), Acetaminophen group(n=20)) and 21 cases of dental implant surgery(which separated to 3 groups : Placebo group(n=10), Myprodol group(n=12), Acetaminophen group(n=9)).

We evaluated the postoperative pain(Pain 1), Pain after first drug administration(Pain 2), the degrees of pain reduction(pain 3), patient's satisfaction for drug, and side effects.

We obtained following results;

1. In Pain 1, making a comparison among groups, there was no significant difference in both cases of flap operation - group and dental implant surgery - group
2. In Pain 2, establishing a comparison among groups, there was no significant difference in flap operation - group, but significant difference was seen between placebo group and Myprodol group in cases of dental implant surgery group( $P<0.05$ ).
3. In Pain 3, making a comparison among groups, Myprodol group showed significant differences compared to placebo group and Acetaminophen group in both cases of flap operation group and dental implant surgery group( $P<0.05$ ).
4. In patient's satisfactory score, making a comparison among groups, there were significant differences between placebo group and Myprodol group in cases of flap operation group and between Myprodol group and Acetaminophen group in cases of dental implant surgery group( $P<0.05$ ).
5. Making a comparison in side effect, no significant difference was seen.

Our conclusion is that Myprodol is a effective oral analgesics to the patients who underwent periodontal surgery or implant

surgery for it's synergism among three  
dugs.

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Key word: Myprodol , postoperative pain  
control, synergism.