

Laparoscopic Suture Rectopexy for Rectal Prolapse

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Purpose : This study was undertaken to evaluate the results of the laparoscopic suture rectopexy in the treatment of rectal prolapse.

Methods : From May 1999 to July 2001, laparoscopic suture rectopexy (LSR) was successfully performed in 10 patients and the results were compared to those of 5 patients with open suture rectopexy (OSR) and 6 patients with resection rectopexy (RR). Preoperative and postoperative functional assessment included Wexner's incontinence constipation score, and anorectal manometry.

Results : Immediate postoperative morbidity was minimal in all groups. Bowel function was resumed significantly (P=0.001), the numbers of the analgesics injection significantly fewer (P<0.001) and postoperative stay was significantly shorter (P<0.001) in the LSR than the open groups. Postoperatively, the anal resting squeezing pressures increased slightly and Wexner's incontinence score decreased significantly in all groups. Constipation score decreased slightly in all patients after surgery. There was one mucosal prolapse recurrence after surgery in the LSR.

Conclusions : Laparoscopic suture rectopexy for rectal prolapse can be performed safely. Recovery is uneventful of shorter duration after the laparoscopic than an open approach. Functional results are obtained similar with both approaches. **J Korean Soc Coloproctol 2002 89-94**

Key Words : Rectal prolapse, Laparoscopic suture rectopexy

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37
 (laparoscopic suture rectopexy) 26 (; 15 , 11 ; 52.5 ± 11.61)
) (open suture rectopexy)
 5 (I ; 4 , 1 ; 53.2 ± 9.78)
 (open resection rectopexy) 6 (II ; ; 54 ± 11.38)

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2)

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⁹(0=perfect, 20=total incontinence)

¹⁰(0=perfect, 30=total constipation)

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: Independent sample t-test

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(iliac fossa)

(right flank)

12 mm

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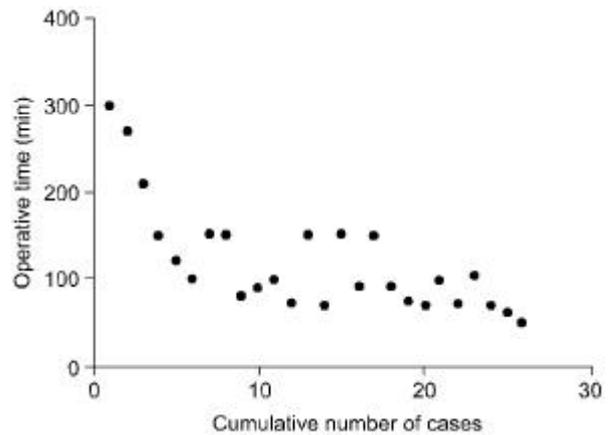


Fig. 1. Correlation between operative time and cumulative number of cases of laparoscopic suture rectopexy. The operative time was significantly related to cumulative number of cases ($r = -0.712$, $P < 0.01$).

가 가 (r=-0.712, P<0.01)(Fig. 1). 6.6 vs. 2.6; p=0.015, I 11.2 vs. 4.6; P=0.076, II 14.5 vs. 8.7; P=0.084)

가 (9.2 vs. 6.6, I 8.4 vs. 5.6, II 14.0 vs. 10.7)(Fig. 3).

(Table 1).

2)

(31.5 vs. 34.7, 가 가 1 , I 22.4 vs. 28.4, II 24.3 vs. 27.1 mmHg) 10

(104.1 vs. 112.4, I 53.0 vs. 72.6, 1 가 11 II 53.7 vs. 62.2 mmHg) 가 .

(Fig. 2), II 1 가

Table 1. Comparison of the clinical course between laparoscopic suture rectopexy (LSR) and open suture (OSR) or resection rectopexy (ORR)

	LSR	OSR	ORR	P-value
Number of patients	26	5	6	
Female	15	4	6	
Male	11	1	0	
Mean age (year)	52.5±11.61	53.2±9.78	54±11.38	NS
Mean operative time (min)	118.8±62.33	122.0±44.7	181.6±62.10	NS
Mean decrease of Hgb (g/dl)	0.59±0.506	1.72±0.858	1.23±0.578	0.001
Mean first flatus (postop. day)	2.4±0.70	3.8±0.84	3.0±0.71	0.001
Mean No. of pain control	2.6±2.08	5.4±2.19	9.2±4.02	<0.001
Mean hospital stay (days)	6.8±1.86	10.4±2.88	10.5±1.05	<0.001

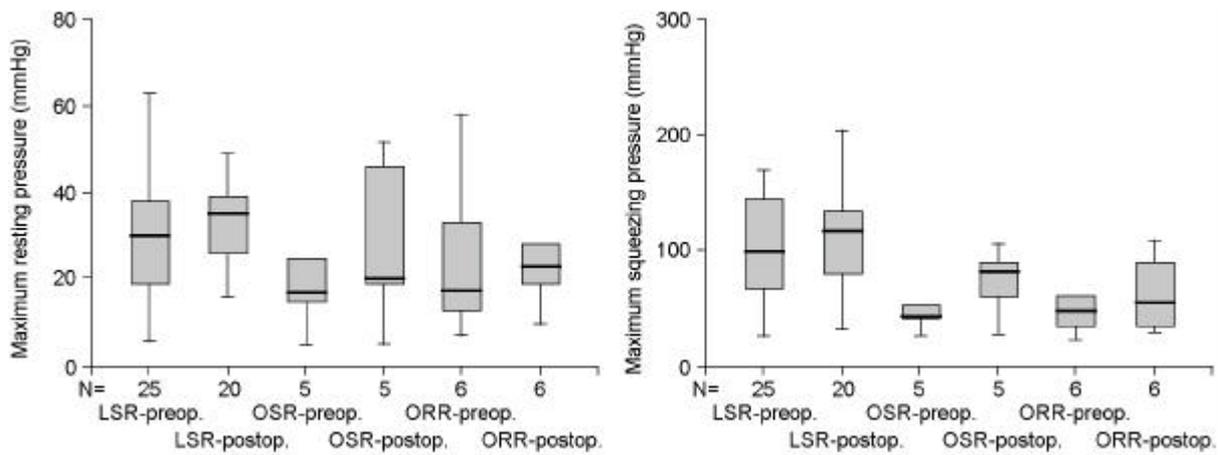


Fig. 2. Change of the anal sphincter function after surgery. Anal maximum resting and squeezing pressures were slightly increased without statistical significance in all groups after surgery. LSR = laparoscopic suture rectopexy; OSR = open suture rectopexy; ORR = open resection rectopexy; pre op = preoperative status; post op = postoperative status.

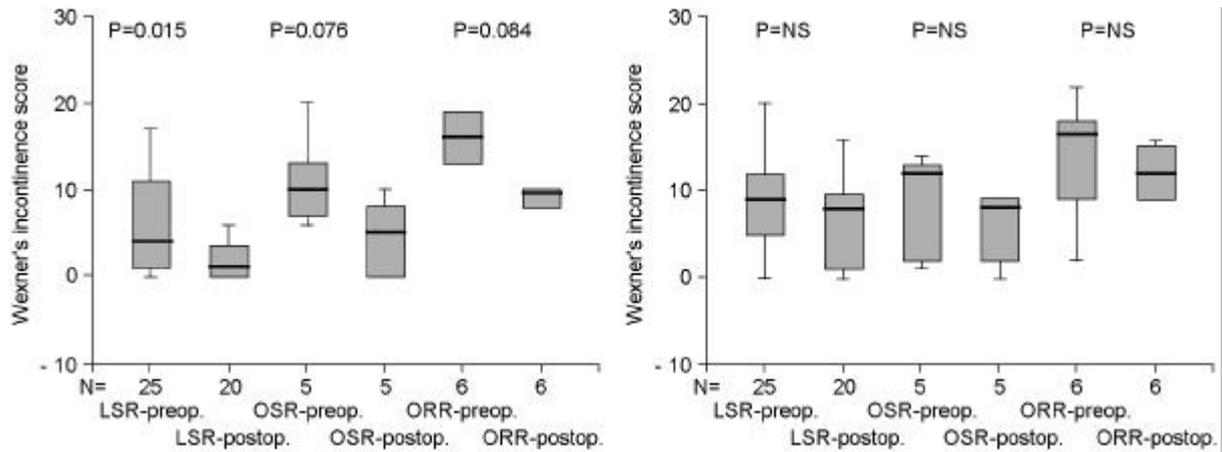


Fig. 3. Change of the incontinence and constipation score after surgery. Wexner's incontinence and constipation scores were slightly decreased in all groups. Change of the incontinence score showed statistical significance in only laparoscopic group (P=0.015).

I 13.2±4.8 , II 10.2±5.9 , pylene mesh stapler
 I 19.5±5.1 ,²

Delorme 가¹⁷

91, I 85, II 70 (P=0.015).¹ 가

. Heah¹⁸

가

가

lex mesh¹¹ Ivaron sponge Mar-⁷ 가

가 가¹² 가

가 (resection recto-²⁰ pexy) 가^{5,7,13}

가¹⁴ 1992 Berman¹⁵ 가

가¹⁶ polypro-¹⁹ Madoff 50% 가

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