

일차 및 이차 진료기관에서 시행할 수 있는 최소침습수술

Minimally Invasive Surgery Available in Primary and Secondary Care Hospitals

120 - 1

Jong Gill Jeong, M.D.

Department of General Surgery

Yosu Chonnam Hospital

E - mail : gsjeong@hanmail.net

가

1, 2

Abstract

After introduction of laparoscopic cholecystectomy in the general surgery practice, the variety of minimal invasive surgery has been expanded year by year. In the early era of 1990th, the laparoscopic cholecystectomy was introduced to our country, and the patient volume & numbers were increased by improving surgical skills & experiences. Nowadays, many kinds of surgery can be done by laparoscopy or thoracoscopy in according to the surgeon's ability. The field of minimal invasive surgery can be divided into diagnostic and therapeutic purposes. In primary & secondary care hospitals, there are many kinds of surgery easily accessible by laparoscopy and thoracoscopy. Cholecystectomy, appendectomy, herniorrhaphy, primary closure of peptic ulcer perforation, pneumothorax, empyema thorax and variable diagnostic procedures can be done. By improving surgical skills, more variable disease spectrums can be controlled by minimal invasive surgery in primary and secondary care hospitals in the future.

Keywords : Minimal invasive surgery; Laparoscopy; Thoracoscopy

: ; ;

가

1987

(1). 4

1990

(2),

(trocar or ports) .
가 10 mm,
1, 2 가 가 5 mm,
가 가 12 mm .

1, 2
가 .

3. (Instrument)
가
(graspers), 가 (scissors),
(irrigation & suction), (clip applier),
12 mm (needle holder), (endopouch,
specimen retrieval bags), (endo -
GIA), (harmonic scalpel) .

,
(1).

1. (Optic Equipment)
(Laparoscope), (computer
chip video camera), (video recorder),
(video monitors) (light source)

5 mm 10 mm
가 0, 10, 30, 45 .
,
(cable) . (light

1. (Open [Insufflation] Technique)
(Blunt Trocar 5 to 12 mm)
(Hasson Trocar)

가 .

2. (Percutaneous Technique)
(Verees needle)

10 mm

2. (Access Equipment)

(pneumoperitoneum)
가 (CO₂) . 가 (gas tank)
가
(insufflator/pressure monitor), 가

1. 10 cm

가 (7).

가 (7, 8).

10 mm

가 (3). 5 mm, 5 mm

bipolar cauterization

endo - loops

(4~6).

10 mm

2~3

3.

1990

(6).

2.

가 (9).

(9, 10),

(11),

(12).

10 mm

5 mm 2 3.0 polypropy-

rene

1 cm, 0.5 cm가

4. 2 cm (pubic tubercle)
가 가
(inferior epigastric vessel) cooper's ligament
가 mesh staple
(16~19).
1~1.5 cm
가 (13). 가 (pre-
peritoneal space)
가 5~10 mmHg
(20).
가 6.
(14, 15).
10 mm 5 mm 12 mm
(15). 가
(21).
5. CT
가 (midaxillary
line) 5~6 10 mm
가
(16). (CO₂) 3~5 mmHg
(Transabdominal approach)
(Totally extraperitoneal approach) 3~4 5 mm
가 (16, 17). Endo - loop (22),
5 mm 12 mm
(endo - GIA)
(23). 가
(anterior superior iliac spine) 가

(23).

가

가

1, 2

가

1, 2



1. Chekan EG, Pappas TN. Minimally invasive surgery. In : Townsend CM, Beauchamp RD, Evers BM, Mattox KL, ed. Sabiston Textbook of surgery. 16th ed. Philadelphia : WB Saunders, 2001 : 209 - 310
2. 1998 ; 1 : 153 - 9
3. Williams LF, Chapman WC, Bonau RA, McGee EC, Boyd RW, Jacobs JK. Comparison of laparoscopic cholecystectomy with

open cholecystectomy in single center. Am Surg 1993 ; 165 : 459 - 65

4. Cox MR, Wilson TG, Luck AJ, Jeans, PL, Padbury RTA, Toouli. Laparoscopic cholecystectomy for acute inflammation of gall bladder. Ann Surg 1993 ; 218 : 630 - 35
5. Frazee RC, Roberts JW, Okeson GC, Symmonds RE, Snyder SK, Smith RW. Open vs. laparoscopic cholecystectomy : A comparison of postoperative pulmonary function. Ann Surg 1991 ; 213 : 651 - 4
6. Deziel DJ, Millikan KW, Economou SG, Doolga A, Ko ST, Airan MC. Complications of laparoscopic cholecystectomy : a national survey of 4,292 hospital and analysis of 77,604 cases. Am J Surg 1993 ; 165 : 9 - 14
7. 1998 ; 1 : 107 - 13
8. Chung RS, Rowland DY, Li P, Diaz J. A meta - analysis of randomized controlled trials of laparoscopic versus conventional appendectomy. Am J Surg 1999 ; 117 : 250 - 6
9. 2003 ; 64 : 219 - 23
10. Pescatore P, Halkic N, Calmes JM, Blum A, Gillet M. Combined laparoscopic - endoscopic method using an omental plug for therapy of gastroduodenal ulcer perforation. Gastrointest Endosc 1998 ; 48 : 411 - 4
11. Darzi A, Cheshire NJ, Somers SS, Super PA, Guillou PJ, Monson JRT. Laparoscopic omental patch repair repair of perforated duodenal ulcer with automated stapler. Br J Surg 1993 ; 80 : 1552 - 3
12. Lau WY, Leung KL, Kwong KH, Davey IC, Robertson C, Li AKC. A randermized study comparing laparoscopic versus open repair of perforated peptic ulcer using suture or sutureless technique. Ann Surg 1996 ; 224 : 131 - 8
13. Adachi Y, Shiraishi N, Shiromizu A, Bando T, Aramaki M, Kitano S. Laparoscopy compared with conventional open gas-

- trectomy. Arch Surg 2000 ; 135 : 806 - 10
14. Sasagawa T, Suzuki H, Litamura Y, Oguma H, Ishizuka N, Endo A, et al. Laparoscopic wedge resection of stomach for submucosal tumor. Dig Endosc 1995 ; 7 : 271 - 7
15. Gurbuz AT, Peetz ME. Resection of a gastric leiomyoma using combined laparoscopic and gastroscopic approach. Surg Endosc 1997 ; 11 : 285 - 6
16. , . 2000 ; 3 : 15 - 22
17. Brooks DC. A prospective comparison of laparoscopic and tension - free open herniorrhaphy. Arch Surg 1994 ; 129 : 361 - 6
18. Fitzgibbons RJ, Katkhouda N, McKernan JB. Laparoscopic inguinal herniorrhaphy : Result of a multi - center trial, Ann Surg (in press)
19. White SI, O'Rourke N, Fielding GA. Laparoscopic mesh repair of recurrent inguinal hernia. Aust N Z J Surg 1996 ; 66 : 91 - 93
20. Arregui ME, Davis CJ, Yucel O, Nagan RE. Laparoscopic mesh repair of inguinal hernia using a preperitoneal approach. Surgical Laparoscopy & Endoscopy 1992 ; 2 : 53 - 8
21. , , , . 1998 ; 1 : 26 -32
22. Nathanson LK, Shimi SM, Wood RBA, Cushieri A. Videothoroscopic ligation of bulla and pleurectomy for spontaneous pneumothorax. Ann Thorac Surg 1991 ; 2 : 316 - 18
23. Ridley PD, Braimbridge MV. Thoracoscopic debridement and pleural irrigation in the management of empyema thoracis. Ann Thorac Surg 1991 ; 51 : 461 - 4

가

* : 3 , 5 , 1 , 2

* () : 2 , 5 , 1

* : , , , , /



가

: [140 - 721]

1 302 - 75

Tel. 02-794-2480, 6587, 2474(ARS 8) Fax. 02-792-1361

‘ ’ ‘ ’