

# Mini Laparoscopic Appendectomy

김원우 · 천성원 · 김응국 · 김승남

가톨릭대학교 의과대학 외과학교실

<Abstract>

## Mini Laparoscopic Appendectomy

Won Woo Kim, M.D., Sung Won Chun, M.D.  
Eung Kook Kim, M.D., Seung Nam Kim, M.D.

*Department of Surgery, Catholic University Medical College, Seoul, Korea*

In a standard procedure for laparoscopic appendectomy(LA), usually three or four trocars were used either with two 10-12mm and one 5mm trocars or two 10-12mm and two 5mm trocars. But we believe that all these trocars are not always necessary for laparoscopic appendectomy. And by reducing the number and caliber size of trocars, we could decrease operative cost and better cosmesis for patient. We report new method of mini laproscopic appendectomy using 2mm size caliber instruments for laparoscopic appendectomy.

Key Word : Mini, Laparoscopy-Appendectomy

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## Technique

The 5mm trocar and scope are inserted through umbilical incision, other 2mm trocar is insert at suprapubic area, and another one at right low quadrant. Appendix is pulled-up with 2mm forceps and mesoappendix is managed with electrocoagulation by 2mm forceps, if harmonic scalpel or bipolar coagulation is available it is more effective for

coagulating mesoappendix (Fig. 1). Then appendical stump is ligated by 1 pretied 2mm-loop(2mm-loops, Se-Jong Medical, Seoul, Korea) and distal part of ligated appendix is also ligated by 1 pretied 2mm-loop and cutted by 2mm-scissors (Fig. 2).

And appendix is removed through umbilical 5mm trocar site by previous blind inserted endobag which has string on it(Endobag, Se-Jong Medical Seoul, Korea) (Fig. 3).

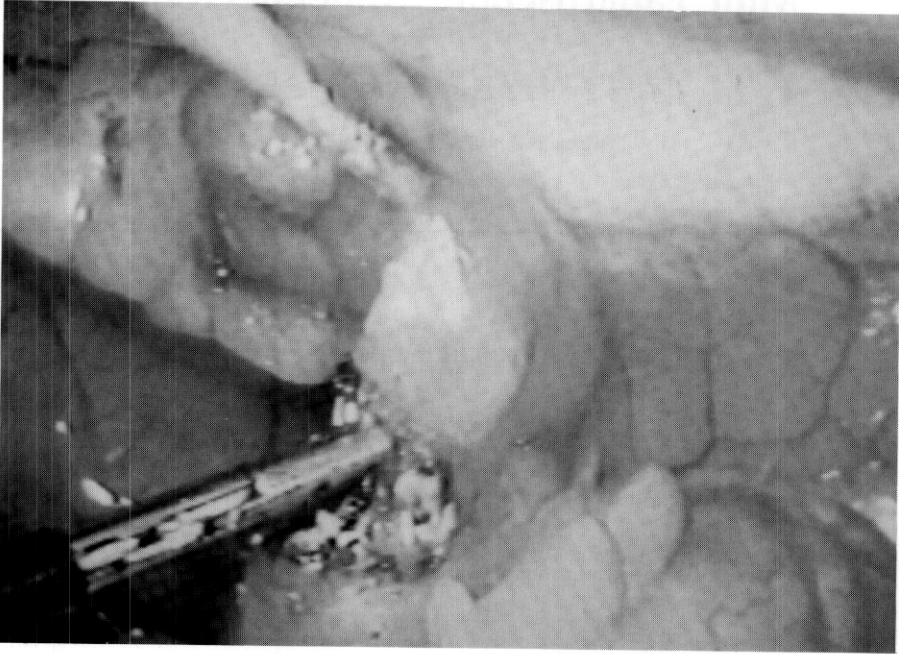


Fig. 1. Mesoappendix is managing with electrocoagulation by 2mm forceps.

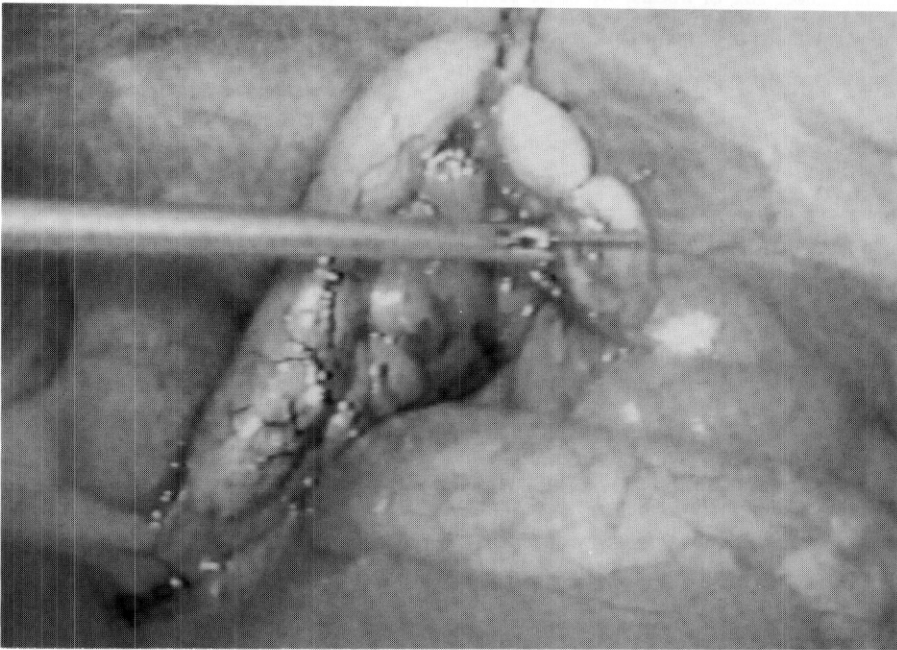


Fig. 2. Appendical stump is ligated by 2mm-loop and cutted by 2mm scissors.

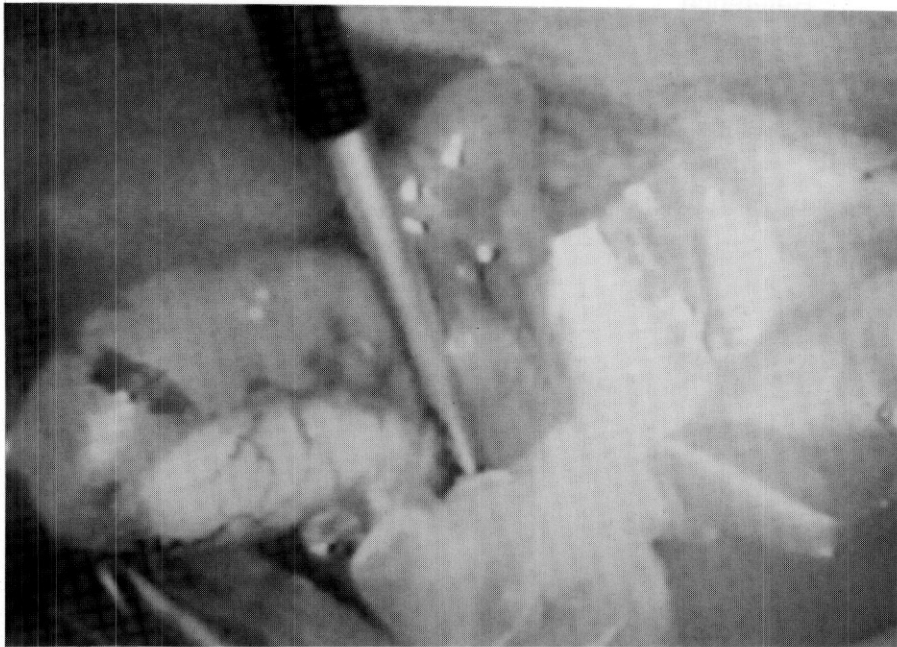


Fig. 3. Appendix is removed by endobag through umbilical trocar site.

## Discussion

Operative treatment of acute appendicitis by laparotomy, described by McBurney [1] by more than 100 years ago. In 1983, laparoscopic appendectomy was first described by Semm [2], a German Surgeon. As open appendectomy is already associated with low morbidity, short hospital length, minimal post operative complain of pain, LA has not been used widely. With improvement in equipment and operative technique, now LA is challenging open appendectomy as the preferred treatment of choice. But still cost effectiveness and cosmetic advantage have not been, achieved by LA. So we tried various method for LA and finally choosed most cost effective and cosmetic procedure.

This technique has some limitations for large gangrenous appendix to remove by 5mm skin incision

site or wide visualization around appendix by 5mm scope. With dissection of mesoappendix attached to appendix to reduce it's bulkyness, you can easily remove appendix by 5mm skin incision. If not able to remove by 5mm skin incision without extension, extend umbilical port and remove through umbilical incision, which site doesn't have cosmetic disadvantage, and don't try to remove aggressively through 5mm skin incision if difficult. And also sometime you can meet problem on visual scope field with 5mm scope and hard to keep on operation by field defect. Then you can change 10mm scope through umbilical site.

Using this technique, we can get cost-effectiveness and cosmetic advantage. This technique is specially recommend for lean patient for laparoscopic appendectomy.

## Reference

1. McBurney C (1894): The incision made in the abdominal wall in cases of appendicitis. *Ann Surg* 20: 38-43
2. Semm K (1983): Endoscopic appendectomy. *Endoscopy* 15: 59-64