

VPoster: #570

## Complication Rates in Total Laparoscopic Hysterectomies Performed Using the McCarus Hysterectomy Technique®

Kimberly Swan MD, Stephanie J Spytek MD, Steven McCarus MD, John Kim MD, Aileen  
Caceres MD

*Center for Specialized Gynecology, Florida Hospital Celebration Health*

### ABSTRACT

**Objective:** To assess the types and frequency of complications following total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Design:** Retrospective analysis of complications following 226 consecutive cases of total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Setting:** Southeastern advanced laparoscopic gynecologic practice

**Patients:** Two hundred and twenty six patients (23-74 years old) who presented with an indication for total laparoscopic hysterectomy.

**Interventions:** Total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Main Results:** Charts of 226 consecutive patients who underwent total laparoscopic hysterectomy via the McCarus Hysterectomy Technique® from January 2008 through December 2009 were reviewed for any complications during the 12 week postoperative period. There were 6 (2.7%) patients with vaginal cuff dehiscence. Two (0.9%) patients required reoperation for abscess drainage and two (0.9%) required reoperation for hemorrhage. Minor complications included 14 (6.2%) urinary tract infections, 10 (4.4%) with granulation tissue, 5 (2.2%) trocar site cellulites, 4 (1.8%) cases of bacterial vaginosis, and 2 (1.7%) cases of postoperative fever.

**Conclusion:** The McCarus Hysterectomy Technique® is a safe method for performing total laparoscopic hysterectomy.

### STUDY OBJECTIVE

The study was undertaken to evaluate the complications following a total laparoscopic hysterectomy performed via the McCarus Hysterectomy Technique®. The objective was to assess the type of complications and their frequency.

### DESIGN

The study was designed as a retrospective chart review. All patients who underwent a total laparoscopic hysterectomy performed via the McCarus Hysterectomy Technique® between January 1<sup>st</sup> 2008 and December 31<sup>st</sup> 2009 were included. The charts were reviewed by a physician for any complication following the patient's procedure.

### SETTING

The patients included in this study were all patients at the Center for Specialized Gynecology at Florida Hospital Celebration. There were three physician partners and two MIS fellows in the practice. All the providers were performing the McCarus Hysterectomy Technique® for total laparoscopic hysterectomy. All cases were performed by two physicians.

### PATIENTS

All patients presenting to the Center for Specialized Gynecology for a total laparoscopic hysterectomy between January 1<sup>st</sup> 2008 and December 31<sup>st</sup> 2009 were included in the study. The most common indications for total laparoscopic hysterectomy were uterine fibroids, pelvic pain, abnormal uterine bleeding and pelvic organ prolapse.

There was a total of 235 patients who underwent a total laparoscopic hysterectomy during the study time. Nine patients underwent a robotic hysterectomy and were not included in the study. The data was collected for a total of 226 patients.

The average age was 44.5 (range 23-74). The average parity 1.9 (0-6) and the average BMI was 28.2 (17.7-50.8). Tobacco use was reported by 16.5% of the patients.

### INTERVENTION

The patient is intubated, a foley is placed in the bladder and the patient is positioned in low dorsal lithotomy position with legs in Allen stirrups. The abdomen is insufflated at the umbilicus with a Veress needle. The abdomen is elevated and a 5mm trocar is placed at the umbilicus. The abdomen and pelvis are inspected and two 11mm trocars are placed in the lower lateral quadrants under direct vision.

The uterine cornua is grasped with a 10mm tenaculum and placed on tension to the contralateral side. A Harmonic Ace® (Ethicon Endo-Surgery Inc, Cincinnati, OH) is used to transect the fallopian and utero-ovarian ligament. The dissection is continued down the broad ligament through the round ligament. The anterior leaf of the broad ligament is dissected to begin the bladder flap. The uterine arteries are skeletonized and transected with the harmonic scalpel. The same procedure is completed on the opposite side.

A sponge stick is placed in the anterior fornix and the uterus is put on tension superiorly with the 10mm tenaculum. The Harmonic Ace® is used to backscore along the sponge stick, creating the anterior culdotomy. The sponge stick is then placed in the posterior fornix and again back scored to create the posterior culdotomy. The uterus is placed on tension to the contralateral side with the tenaculum and the Harmonic Ace® is used to connect the two culdotomies. The same procedure is done on the opposite side. The specimen is removed through the vagina. The vaginal cuff is closed with a modified Richardson stitch at each apex of the cuff with 0 Vicryl® (Ethicon, Inc, Somerville, NJ). Figure of eight stiches with 0 Vicryl® are used to close the remaining cuff. After a low pressure test demonstrating hemostasis the instruments and trocars are removed and the abdomen is desufflated.



VPoster: #570

## Complication Rates in Total Laparoscopic Hysterectomies Performed Using the McCarus Hysterectomy Technique®

Kimberly Swan MD, Stephanie J Spytek MD, Steven McCarus MD, John Kim MD, Aileen  
Caceres MD

*Center for Specialized Gynecology, Florida Hospital Celebration Health*

### ABSTRACT

**Objective:** To assess the types and frequency of complications following total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Design:** Retrospective analysis of complications following 226 consecutive cases of total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Setting:** Southeastern advanced laparoscopic gynecologic practice

**Patients:** Two hundred and twenty six patients (23-74 years old) who presented with an indication for total laparoscopic hysterectomy.

**Interventions:** Total laparoscopic hysterectomy performed using the McCarus Hysterectomy Technique®.

**Main Results:** Charts of 226 consecutive patients who underwent total laparoscopic hysterectomy via the McCarus Hysterectomy Technique® from January 2008 through December 2009 were reviewed for any complications during the 12 week postoperative period. There were 6 (2.7%) patients with vaginal cuff dehiscence. Two (0.9%) patients required reoperation for abscess drainage and two (0.9%) required reoperation for bleeding. Minor complications included 14 (6.2%) urinary tract infections, 10 (4.4%) with granulation tissue, 5 (2.2%) trocar site cellulites, 4 (1.8%) cases of bacterial vaginosis, and 2 (1.7%) cases of postoperative fever.

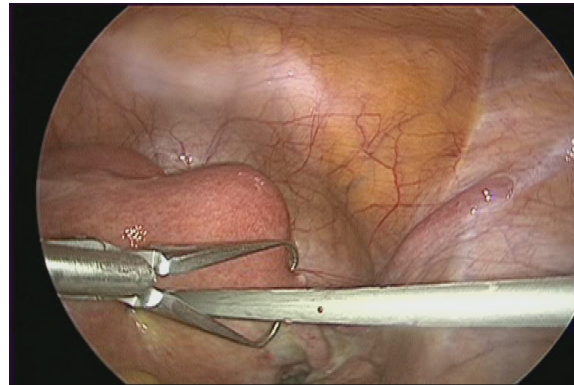
**Conclusion:** The McCarus Hysterectomy Technique® is a safe method for performing total laparoscopic hysterectomy

### VIDEO INTRODUCTION

48 year old female with symptomatic uterine fibroids. Approximately 12 week size uterus. Patient wished to retain her ovaries.

For the sake of time only the right side dissection is included in the video. Parts of the video are played at two times actual speed.

### VIDEO



### MEASUREMENTS & RESULTS

The average estimated blood loss was 104.5 mL (range 0-1200). The average specimen weight was 179 grams (range 22-875).

The pathology evaluation of the specimens revealed the following pathologic findings: fibroids 59.5%, adenomyosis 53%, endometriosis 12.5%, uterine polyp 7%, other pathology 5%.

The following complications were noted with frequency:

Urinary tract infection 14/226 (6.19%)

Granulation tissue 10/226 (4.42%)

Incisional cellulitis 5/226 (2.21%)

**Cuff dehiscence 6/226 (2.65%)**

Bacterial vaginosis 4/226 (1.76%)

Fluid collection 3/226 (1.32%)

Postoperative fever 2/226 (0.88%)

Significant postoperative bleed (0.88%)

Reoperation rate (excluding dehiscence repair) 4/226 (1.76%) – two pelvic abscesses requiring surgical drainage and two significant hemorrhages requiring surgical management.

### CONCLUSIONS

The McCarus Hysterectomy Technique® is a safe technique for total laparoscopic hysterectomy. The technique appears to have a similar or lower rate of dehiscence compared with rates in published literature.