

The Safety of Incidental Appendectomy at the Time of Total Laparoscopic Hysterectomy



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Introduction

Appendicitis, the inflammation of the appendix, is one of the most frequent indications for an emergent abdominal surgical procedure worldwide¹.

Obstetricians and gynecologists perform nearly 5 million pelvic surgeries yearly, and have the opportunity to stem the increasing rate of acute appendicitis (Table 1) by performing incidental prophylactic appendectomy.

The objective of this study was to elucidate the safety of incidental appendectomy at the time of total laparoscopic hysterectomy.

Table 1. National estimated in-hospital appendicitis rates for women



Methods

- Study design: retrospective chart review
- <u>Study Objective</u>: To determine if incidental appendectomy performed at the time of total laparoscopic hysterectomy (TLH) increases surgical duration or complications.
- <u>Study population</u>: Patients undergoing laparoscopic hysterectomies performed by a single surgeon from September 5, 1996 to April 21, 2016.
- <u>Statistics</u>: the data was analyzed with Mann Whitney- U tests for the nonparametric quantitative comparisons and Chi Square of Association tests were used for the categorical comparisons. All tests had a significance cut off of p <0.05.

Results

· Picture of an Incidental Appendectomy at the Time of TLH





• Primary Outcomes

Table 2. Demographic comparison of all patients and the matched case-control

	Matched Case-control cohort					
Demographic	All Mean(SD) N=1542	No Appendectomy Mean(SD) N=762	Appendectomy Mean(SD) N=762	Mann Whitney U p value		
Age (years)	51.78 (11.52)	51.77 (11.47)	51.79 (11.58)	0.79		
BMI (kg/m2)	27.99 (6.85)	27.77 (6.89)	28.20 (6.81)	0.06		
Parity	1.26 (1.21)	1.24 (1.19)	1.28 (1.23)	0.61		
Duration of Surgery (minutes)	120.95 (61.22)	129.91 (59.1)	112.01 (62.01)	<0.001		
Transfusion	.039 (.32)	.042 (.31)	.037 (.33)	0.259		
EBL (ml)	132.67 (189.56)	142.15 (196.15)	123.22 (182.38)	0.043		
Length of Stay (days)	1.21 (.71)	1.34 (.87)	1.09 (.46)	< 0.001		

Secondary Outcomes								
	Matched Case control cohort							
	No a	ppendectomy	Ар	pendectomy				
	N=762		N=762					
	#	%	#	%	p value*			
Any								
complication	81	10.60%	41	5.40%	< 0.001			
Infectious								
complication	16	2.10%	10	1.30%	0.235			
Urological								
Complication	19	2.50%	11	1.40%	0.14			
Vaginal								
Complications	25	3.30%	9	1.20%	0.006			
Reoperative	25	3.3070	5	1.2070	0.000			
•	25	4.60%	13	1.70%	0.001			
complication	35	4.00%	13	1.70%	0.001			

Conclusion

✓ The mean duration of surgery with appendectomy was shorter; estimated blood loss was less and transfusions were similar. Infectious complications were fewer, re-operations were fewer and hospital stays were shorter.

✓ Incidental appendectomy during laparoscopic hysterectomy appears safe and feasible.

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