

Analyzing my complication, infection and takeback rates:^{1,2} Accurate office data and formula

In October 2016, the Sequoia Chief of Staff and the Chair of Gynecology wrote to the Medical Executive Committee asking that an Ad Hoc Committee of three Sequoia doctors be formed to investigate my practice for “increased complications, infections, enterotomies and takebacks to the operating room.” They would not provide me with their rates of concern, against Sequoia Bylaws, but they did provide me with 28 medical record numbers.

To learn on my own what their concerns were about my practice, I counted 628 total cases in the period of their 28 cases. Using the standard rate formula of complicated cases divided by total cases, my overall complication rate was (28/628) 4.5%.

I then divided my total cases into two separate data sets to look for subsets of concerning complication rates: 21 had complications out of 549 Outpatient laparoscopy (scope) operations, 7 had complications out of 79 by Inpatient open-incision which were mostly complex ovary cancer operations.

Total complications: 28

Any complication	Total	In	Out
# complication	28	7	21
Total cases	628	79	549
Rate	4.5%	9%	3.8%

Benign laparoscopic hysterectomy literature:³⁻⁷

Ovary cancer, Gyn Oncology literature:⁸⁻¹⁹

Total

NSQIP Literature: My practice:

4-19%

3.8%

11-30%

9.0%

4.5%

Compared to published procedures, my overall complication rates were safe, and not increased.^{20,21}

Among the 28 complications, there were:

- 10 cases of **infection** (1.6%): 2 wound, 3 deep tissue and 5 “possible” infections readmitted and treated with antibiotics only
- 3 cases of post-operative hemorrhage (.5%) with 2 delayed diagnosis.
- 2 urological injuries-repaired at re-operation (.4%).
- 9 intestinal complications: 1 hernia, 2 anastomotic leaks, 1 bowel ischemia, 1 bowel leak from LOA., 3 cases of accidental **enterotomy** from trocars: 1 secondary umbilical, 1 left upper quadrant, 1 entry umbilical (1.4%).
- 4 management issues: 1 readmission for dehydration, 1 DKA, 1 wrongful BSO, 1 constipation (.6%).
- 15 of above had **takebacks**, 11 from laparoscopic cases, 4 from open cases.(2.4%)

Analyzing Infection Rates

Using the standard formula, (10/628) 1.6%: 2 superficial wound, 3 deep tissue and 5 “possible” infections readmitted and treated with antibiotics only.

There were 3 infections among the 79 Open incision cases, and 7 within the 549 Outpatient Laparoscopic (Scope) caselist. My 549 “scope cases” include 40% cancer patients, 10% having node dissections, and 10% lysis of adhesions with more co-morbidities and risk-factors.

10 patients had an infection.

Infections	Total	In	Out
# Infections	10	3	7
Total cases	628	79	549
Rate	1.6%	3.7%	1.3%

Benign laparoscopic hysterectomy literature:^{3-5,22}

Ovary cancer, Gyn Oncology literature:^{8-14,16-18,23}

Total NSQIP GynOnc service^{20,24}

NSQIP Literature:

My practice:

2 - 9%

1.4%

.4 - 25%

5.0%

2.6 - 15%

1.6%

Compared to published procedures, my infection rates were safe, and not increased.

Analyzing Takeback Rates

15 cases of takeback to the OR:

Takebacks	Total	# OPEN	# SCOPE
# return to OR	15	4	11
Total cases	628	79	549
Rate	2.4%	5.0%	2.0%

Benign laparoscopic hysterectomy literature:^{4,5,7}

Ovary cancer, Gyn Oncology literature:^{8,11,13-15,18}

Literature:

My practice:

.8- 6%

2.0%

4-12%

5.0%

Compared to published procedures, my takeback rates were safe, and not increased.

Analyzing Enterotomy Rates

During surgery, a complication can develop from accidental injury or as a known effect from a procedure done correctly. If a hole is *accidentally* made in an artery or a ureter or the intestine, that is a complication. If a hole is made *incidentally* during the purposeful cancer removal from an organ or a vessel, or separation of bowel loops that are adherent, that is not a complication. If an intended closure of a hole in an artery or ureter or intestine leaks after the surgery, that is a complication, and a takeback to the operating room.

Enterotomy	Total	In	Out
# enterotomys	24	14	10
Total cases	628	79	549
Rate	3.8%	18%	1.8%

24 had enterotomies: 10 had enterotomy incidental to an adhesiolysis, and 11 incidental to debulking ovary cancer and 3 had accidental enterotomies, repaired. 1 patient had reoperation for breakdown of enterotomy closure. None of the other intestinal complications were related to an enterotomy.

Lysis of adhesions was associated with a 10% risk of bowel defect in a General Surgery report,²⁵ and 6% in a large meta-analysis of adhesiolysis.²⁶

Compared to published procedures, my enterotomy rates were safe, and not increased.

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