An Analysis of Quality Outcomes in Patients Having a Hysterectomy: Robotics vs the Vaginal Approach

Martin A. Martino MD
Lehigh Valley Health Network, martin_a.martino@lvhn.org

Jocelyn Shubella
Lehigh Valley Health Network, Jocelyn.Shubella@lvhn.org

Elizabeth A. Berger DO
Lehigh Valley Health Network, Elizabeth.Berger@lvhn.org

Follow this and additional works at: http://scholarlyworks.lvhn.org/obstetrics-gynecology
Part of the Endocrine System Commons, Obstetrics and Gynecology Commons, and the Surgery Commons

Published In/Presented At

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.
An Analysis of Quality Outcomes in Patients Having a Hysterectomy: Robotics vs the Vaginal Approach

Martin A. Martino MD1,2, Jocelyn Shubella,1 Elizabeth Berger MD3

1 Division of Gynecologic Oncology, John and Dorothy Morgan Cancer Center, Lehigh Valley Health Network, Allentown, PA; 2University of South Florida College of Medicine, Tampa, FL; 3Department of Obstetrics and Gynecology, Lehigh Valley Health Network, Allentown, PA.

Objective:
To analyze quality outcomes in patients who underwent a robotic-assisted hysterectomy (R) and vaginal hysterectomy (V) by high-volume surgeons after the robotics learning curve.

Methods:
All patients who underwent a robotic and vaginal hysterectomy for benign disease from 6/2006-6/2011 were extracted from our database and de-identified. Inclusion criteria for high volume surgeons were completion of 20 cases in any year. The first 20 cases within each cohort were considered “the learning curve” and removed from analysis. Demographic data reviewed included age and BMI. Primary outcome measures were length of stay (LOS), estimated blood loss (EBL), and operative time (OR time). Secondary outcome measures were complication rates including bladder complications, ureteral injury, vaginal side-wall lacerations, bowel injury and hematomas. Student’s t-tests and Pearson’s χ² tests were used for data analysis. This study was IRB approved.

Results:
A total of 416 patients (236 V, 180 R) met the inclusion criteria. There were no significant differences between the two groups in the demographic data. The mean LOS for R was less than V (1990 min ± 795 min vs. 2490 min ± 1502 min) (p<.01). The mean EBL for R was less than V (103 cc vs. 318 cc) (p<.01). The mean OR time was also less for R than V (206 min ± 71 min vs. 235 min ± 68 min) (p<.01).

Conclusion:
After the learning curve, patients who have a robotic hysterectomy may have improved quality outcomes when surgery is performed by high-volume surgeons.