Preoperative Mental Health Optimization in an ERAS Pathway Leads to Increased Rate of Same-Day Discharge for Laparoscopic Hysterectomy Patients

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BACKGROUND

- Up to 62% of women undergoing elective laparoscopic hysterectomy for benign indications also have a chronic pain condition.
- One of the fundamental components of an Enhanced Recovery After Surgery (ERAS) pathway is preoperative patient education and expectation management.
- The ERAS pathway for laparoscopic hysterectomy at our institution was designed to optimize mental health and empower patients to be active participants in the recovery process.
- Because inadequate pain control is a common reason for hospital admission following laparoscopic hysterectomy, we hypothesized that ERAS patients who receive pain-coping skills counseling would be more likely to be discharged on the same day of their surgery than ERAS patients who do not.

METHODS

- An ERAS pathway was implemented in September 2015.
- The mental health optimization component of the ERAS pathway was developed by pain psychologists, who provided:
  - Comprehensive pain coping skills workbook including lessons in cognitive behavioral therapy, diaphragmatic breathing, and relaxation training
  - A phone consultation including screening for risk factors of poor post-operative pain coping, symptoms of anxiety, depression and baseline pain intensity

RESULTS

Table 1: Rates of same-day discharge among ERAS patients based on chronic pain and counseling status

Group	n	Same-day Discharge	p-value
1= Non-chronic pain patients who received counseling	15	66.7% (n=10/15)	0.327
2= Chronic pain patients who received counseling	27	59.3% (n=16/27)	
3= Non-chronic pain patients who did not receive counseling	58	56.9% (n=33/58)	
4= Chronic pain patients who did not receive counseling	65	52.3% (n=34/65)	

Table 1: Demographics

	Control (n= 90) No. (%)	ERAS (n= 165) No. (%)	p-value
Age (Years) (Mean ± SD)	42.5 ± 6.8	42.5 ± 6.5	0.995
BMI (Mean ± SD)	31.4 ± 7.8	32.6 ± 8.2	0.256
ASA Physical Status			0.628
1	5	8	
2	53	101	
3	31	56	
4	1	0	
Comorbid chronic pain	46 (51.1)	92 (55.8)	0.478

Figure 1: Dot Plot of Increasing Admission Probability by Risk Stratification Group

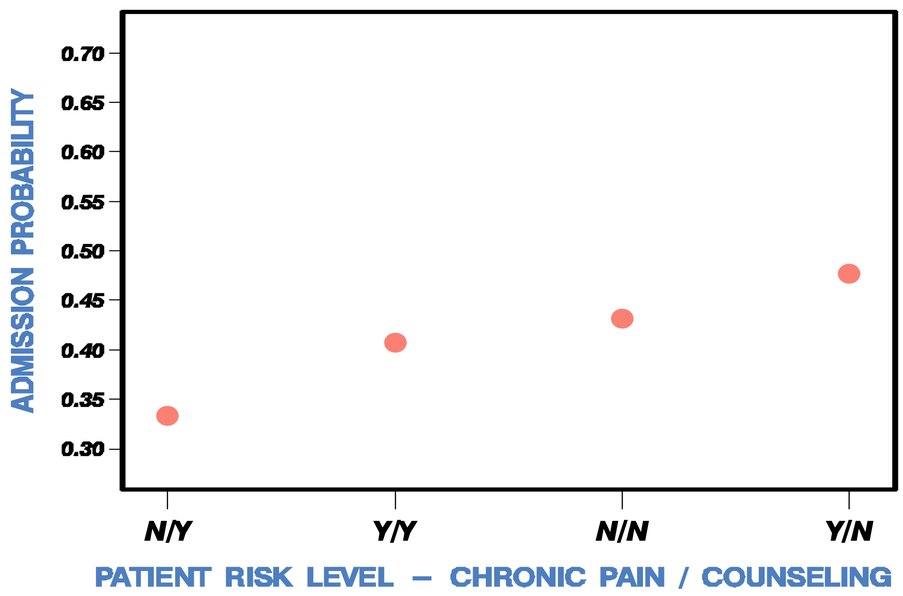

Table 2: Results

	Control (n= 90) No. (%)	ERAS (n= 165) No. (%)	p-value
Length of procedure (min) (Mean ± SD)	185.8 ± 75.7	199.2 ± 73.4	0.167
Same-day discharge	8 (8.9)	93 (56.4)	<0.0001
Length of stay (Mean ± SD)	1.2 ± 1.2	0.5 ± 0.8	<0.0001
Readmission			
< 30-days postop	5 (5.6)	6 (3.6)	0.472
< 90 days postop	5 (5.6)	9 (5.5)	0.973

CONCLUSION

- Rate of same-day discharge improved after implementation of an ERAS pathway for laparoscopic hysterectomy overall.
- Among patients in the ERAS group, those who received mental health optimization prior to surgery were more likely to be discharged on the day of surgery compared to those who did not, but this trend was not statistically significant.
- Larger sample sizes and higher patient compliance with mental health optimization are needed to better determine the impact of this preoperative ERAS component.
- Areas for further research include investigating potential confounding variables and disparities in compliance among different demographic groups.

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