

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

A large proportion of women (27-62%) undergoing elective laparoscopic hysterectomy for benign indications also have a chronic pain condition.¹⁻⁴ 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. The elective mental health optimization component includes a targeted pain-coping skills counseling session by a pain psychologist. 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 for laparoscopic hysterectomy was implemented in September 2015. The mental health optimization component of the ERAS pathway was developed and carried out by pain psychologists, who provided both a (i) comprehensive pain coping skills workbook and (ii) phone consultation. The workbook included lessons in cognitive behavioral therapy, diaphragmatic breathing, and progressive muscle relaxation training. The phone consultation included screening for risk factors of poor post-operative pain coping, including symptoms of anxiety, depression and baseline pain intensity. The primary reason for missing the session was no response after multiple attempts to reach the patient.

A retrospective chart review was conducted for all patients who underwent laparoscopic hysterectomy on an ERAS pathway (September 2015-August 2016). Patients who underwent the same surgery with the same group of surgeons prior to the ERAS pathway (April 2014-September 2015) served as controls. There were 165 patients in the ERAS group, and 90 in the control group. ERAS and control groups were not statistically different in terms of mean age, BMI, race, or ASA status. Data collected included patient demographics, presence of a comorbid chronic pain syndrome, completion of the counseling session, and length of stay.

Results

Over half of all patients in both groups had a chronic pain condition at the time of surgery (55.8% (n=92/165) ERAS and 51.1% (n=46/90) controls, p=0.478). 56.4% (n=93/165) of ERAS patients were discharged on the same day of their surgery compared to 8.9% (n=8/90) of patients in the control group (p<.0001).

Disposition data was analyzed according to four groups based on the patient's status of pre-existing chronic pain and completion of the counseling skills session: non-chronic pain patients who received counseling, chronic pain patients who received counseling, non-chronic pain patients who did not receive counseling, and chronic pain patients who did not receive counseling. See Table 1 for 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)	

Conclusions

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.

References

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