# Factors Contributing to Length of Stay Post Hysterectomy

*Denise Braica, Magdalena Halt, Candice Houda, David Munday*
The Queen Elizabeth Hospital, 28 Woodville Rd, Woodville South, SA, 5011

## Introduction

- Length of stay post procedure has become an important factor in assessing: quality of procedure, resource allocation[1], and clinical outcomes, including post-operative complications and physical deterioration[2]
- Worldwide rates of hysterectomies are decreasing but Australia's rates of hysterectomy remains higher than other countries globally[3].
- Decreasing length of stay in women post hysterectomy within Australia can lead to better outcomes for patients and hospitals.

## Aim/Objectives

- Identify factors that contribute to length of stay in women post laparoscopic, vaginal and abdominal hysterectomies in a tertiary hospital
- Long term aim of identifying & implementing strategies to decrease length of stay

## Method

- Data was utilised from information already being collected in the unit, with the aim to improve practice and safety and quality
- Demographic, pre-operative, intra-operative and post-operative factors were analysed to find any relationships between factors and how these affected length of stay.
- Any stay longer than 1 night was considered prolonged.
- Retrospective analysis was performed using Excel and SPSS with comparative group testing

## Results

- From October 2018 until January 2020, 199 women underwent a hysterectomy at the Queen Elizabeth Hospital
- 33% had laparoscopic hysterectomy, 36% had abdominal hysterectomy and 31% had vaginal hysterectomy
- Demographic factors: Abdominal hysterectomies were significantly more likely to result in LOS >1 night (p= 0.00)
- Pre-operative factors: No statistical significant for microlax, or ERAS drink. Pre-op Hb showed trend towards significance but sample size too small
- Intra-operative factors: EBL < 500mls was significantly associated with LOS < 1 night (p = 0.01 ) as well as intra-operative complications (p = 0.00)
- Post-operative factors: post operative nausea and vomiting and pain were significantly associated (p = 0.00 and 0.00)
- Pain pre-op was more likely to have pain post-op that contributes to increased length of stay (p = 0.00)

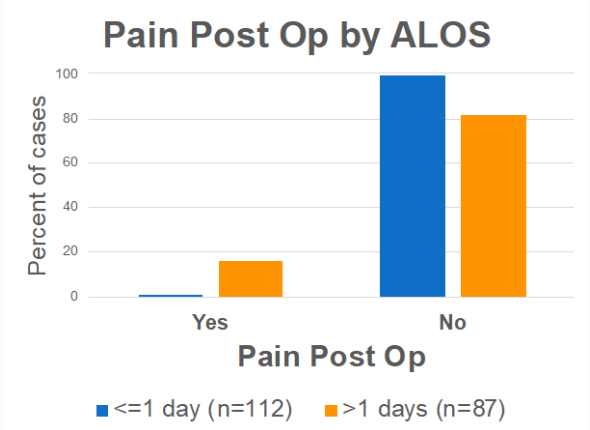


**Figure 1: Pain post op in relation to length of stay(ALOS).**

| Demographic | Pre-operative | Intra-operative | Post-operative |
|---|---|---|---|
| Age | Pain | Paracoxib | Pain |
| BMI | Microlax | Anti-Emetic | RBC transfusion required |
| Location | ERAS drink | Uterine weight | Nausea and vomiting |
| Indication | Pre-op Hb | Intra-operative complications | PCA |
| Hysterectomy type<br>○ Abdominal<br>○ Vaginal<br>○ Laporoscopic | | EBL | |
| ASA | | | |

**Table 1: Factors analysed - demographic, pre-operative, intra-operative and post-operative**

## Conclusion

- Factors that showed statistical significance in relation to ALOS > 1 day:
  - EBL and transfusion requirements
    - Pre-op Hb showed trend towards significance however sample size too small
  - Intra-operative complications
  - Post operative nausea and vomiting
  - Post operative pain
    - Including a significant relationship between those with pre-operative pain and those with post operative pain

Limitations: sample size