

Enhancing Patient's recovery after Major Gynaecology Surgery at Singapore General Hospital

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Background

The Enhanced Recovery Programme is a multimodal approach to improve post-operative recovery and minimise morbidity for patients undergoing major gynaecological surgeries. It is a multiphasic integration of measures which includes:

- Pre-operative assessment to optimise the patient for major surgery
- Reducing the physical stress of the operation
- Peri and post operative pain management
- Early mobilisation and re-introduction of oral diet

Aim

- Enhance the patient's post operative recovery without decreasing patient satisfaction nor increasing hospital readmission rate

Method

Since 2012, we have introduced a program to encourage early mobilisation and re-feeding for patients after their surgical procedure.

This program has a two pronged approach to achieve this:

- The use of regular non-opioid analgesics to reduce postoperative drowsiness, lessen bowel dysmotility while permitting earlier re-feeding, mobilisation and recovery
 - The use of "preOp" drinks* (a **clear, non-carbonated**, lemon-flavoured, iso-osmolar **carbohydrate drink**) aimed at transforming the patient from a fasting to a fed state.
- The fasting period is lessened by allowing patients to take preOp drinks up to 2 hours before anaesthesia. Diabetic patients were not given preOp drinks.
- Plan-Do-Study-Act (PDSA) methodology was applied to measure patient outcomes for the effectiveness of the program whilst ensuring quality of care and patient safety is not compromised (via the readmission rate as proxy) nor patient satisfaction.

Outcomes measured

- Length of Post-Operative stay (LOS) in hospital
- Readmission rate: hospital re-admission within 15 days of discharge from hospital)
- Patient Satisfaction Questionnaire: patients were contacted by the Service Quality Department to rate their satisfaction with their treatment.

Results

All women undergoing major gynaecological elective surgery were eligible for these measures. However, due to consultant preferences, some women were not offered any / all of the measures. The results were analysed based on the intention to treat.

With the introduction of the measures, there was a decline in the overall length of hospital stay. As shown in Figure 1 below, patients discharged on the fourth post-operative day increased from a baseline of 80% to 86.2%.

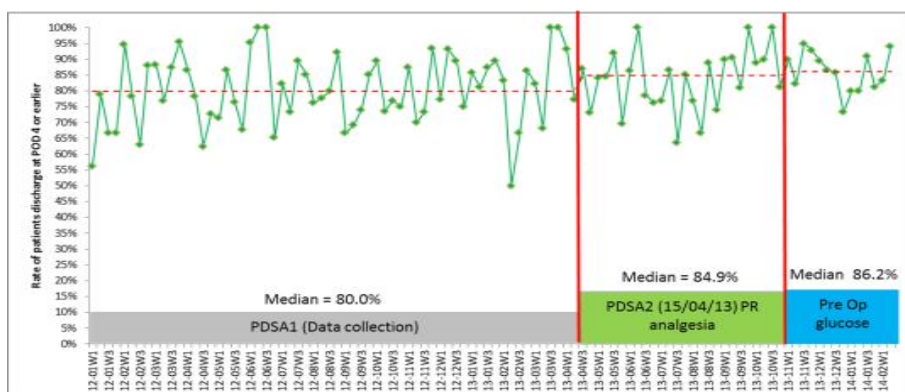


Figure 1: Rate of Patient Discharge at Post-Operative Day (POD) 4

There was no increase in the readmission rates as shown in Figure 2.

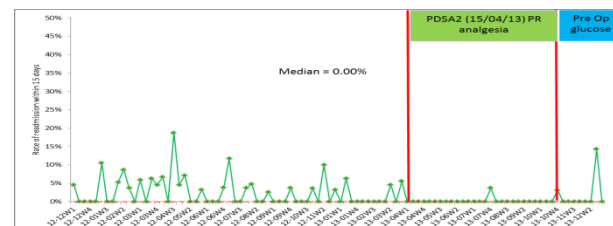


Figure 2: Rate of Readmission with 15 days of discharge

Patient Satisfaction Questionnaire

1. Adequacy of pain relief (analgesia)

Post Op pain relief	Yes	No
Pain well controlled	219	14
Enough pain medication	231	2

2. Adequacy of Length of Inpatient Stay

Length of Stay	No. patients
Too Short	8
Just Right	169
Too Long	13
No comments	43

3. Patient Satisfaction – pre-operative counselling and hospital stay

Satisfied with hospital care	No. Patients
Satisfactory	9
Good or very good	213
No comments	1

Conclusion

Our enhanced recovery initiative successfully improved patients' recovery following major surgery without compromising patients' care or safety. Moreover our patients were able to resume their normal day activities earlier and with greater ease. The secondary gains of a shorter hospital stay benefits the patients by reducing their hospital costs and better optimises existing hospital resources by freeing up in-patient hospital beds. This change in practice can only be successful with a change in mindsets of the surgeons, nursing team and most importantly the patients.

The authors recommend extending this programme to other surgical specialties.

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- preOp drinks was the only preparation available at the time of study

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