

Enhanced recovery after surgery: compliance in daily practice

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Introduction

- Uptake of ERAS has been slow
 - Change of practice
 - Resource allocation
 - Difficult to implement
 - Poor compliance

What this study adds

Perioperative routines in colonic cancer surgery differ widely in northern Europe and deviate considerably from the best available evidence

BMJ 2005;330;1420-1421

A protocol is not enough to implement an enhanced recovery programme for colorectal resection

British Journal of Surgery 2007; 94: 224–231

Aim

- To assess the compliance to a newly established ERAS protocol in routine clinical practice

Methods

- Newly established protocol
- Prospective audit
- Between December 2010 and March 2011
- Data presented as median (interquarantile range) and non-parametric tests used

Results

- 30 patients during the study period
 - Male : female 23: 7
 - Age 72 (67-78)
 - ASA grade (I:II:III:IV) 0 : 19 : 11 : 0

- Pathology
 - Benign: malignant 1: 29

Results

- Type of operation
 - 1 Pan-proctocolectomy
 - 15 Left sided resections
 - 14 Right sided resections
- Type of operation: laparoscopic vs. open
 - 10 Laparoscopic procedures (one conversion)
 - 20 Open resections

Results (compliance)

Pre-operative

	Compliance
Preoperative education	30 (100 %)
Carbohydrate loading	28 (94 %)
Oral bowel preparation	05 (17 %)

Results (compliance)

Intra-operative

	Compliance
Epidurals	30 (100 %)
Goal directed fluids (Vigileo®)	29 (96 %)
Transverse incisions	03 (10 %)
Abdominal drains	04 (13 %)

Results (compliance)

Post-operative

	Compliance
Oral diet (tolerated)	25 (83 %), day 1
Discontinuation of iv fluids	18 (60 %), day 1
Removal of catheter	24 (70 %), day 1
Mobilization	14 (47 %), day 1
Removal of epidural	25 (83 %), day 2
Regular opiates	18 (60 %)

Results

Length of stay:
 $p < 0.001$

11(9-14) vs. 7(4-9),

(Mann Whitney U test)

Discussion

- Compliance
 - Reduced in postoperative period
 - Clinical indications
- Compliance to ERAS, why is it important?

Conclusion: Improved adherence to the standardized multimodal ERAS protocol is significantly associated with improved clinical outcomes following major colorectal cancer surgery, indicating a dose-response relationship.

Gustafsson UO *et al.* Arch Surg. 2011; 146(5):571-7

Conclusion

- Reasonably good compliance to ERAS can be achieved
 - Compliance tends to reduce postoperatively
- Future:
 - Re-audit
 - Use of continuous local anaesthetic wound infiltration