

A-7255: Impact of implementation of enhanced recovery after surgery protocol in elective caesarean section

S Choudhary, S Gupta, A Baghel, K Sharma
Anaesthesiology, Geetanjali Medical College & Hospital, Udaipur, India

Introduction

Enhanced recovery programs following caesarean delivery (CD) are slowly gaining widespread acceptance to accelerate postoperative recovery, with early discharge and reduced complication rates, without compromising on the quality of care. We designed this study to evaluate the implementation of an enhanced recovery after surgery (ERAS) protocol for elective CD in a tertiary care centre and analyse the factors affecting the duration of hospital stay, and quality of recovery.

Methods

This prospective, randomized controlled, clinical study was conducted after ethical approval in 160 patients 18-40 years age, ASA grade-II undergoing elective CD. An ERAS protocol was implemented in 80 patients, while another group of 80 patients continued with routine hospital based protocol and served as control, from January to December 2020. The primary outcome measure included the postoperative duration of stay while the quality of recovery, postoperative pain, initiation of breast feeding, and postoperative ambulation were the secondary outcome measures.

Results

The postoperative duration of stay was significantly decreased in the ERAS group (2.87±0.51 days) vs. Traditional protocol (5.5±0.50 days, P<0.001) Time to catheterization removal, postoperative ambulation, initiation of liquids and semi-solids along with initiation of breast feeding was significantly earlier (P<0.001) in the ERAS group. Quality of recovery score (QoR-11) was found significantly more in ERAS group (77.38±3.32) as compared to traditional group (60.88±3.65, P<0.001).

Table: Comparison of ERAS and control groups

	ERAS Group (n=80)	Control Group (n=80)	P value
Initiation of breast feeding (min)	47.7±7.14	211.3±117.7	≤0.001
Initiation of clear liquid intake (h)	4.15±0.27	23.4±2.21	≤0.001
Initiation of semisolid food intake (h)	8.10±0.48	39.4±4.68	≤0.001
Decatheterization (h)	6.06±0.18	43.2±4.69	≤0.001
Postop ambulation (h)	7.17±0.61	23.1±1.65	≤0.001
VAS at 24 h	1.75±0.86	3.10±1.23	≤0.001
Postoperative duration of stay (days)	2.87±0.51	5.5±0.50	≤0.001
Quality of recovery Score (QoR-11)	77.4±3.32	60.9±3.65	≤0.001

Discussion

Implementation of an ERAS protocol showed significant benefit in all the outcomes, we evaluated. However, future studies are needed for wide spread acceptance of ERAS protocol along with analysis of barriers to its implementation.

References

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