

Challenges of maintaining Enhanced Recovery for Obstetric Surgery: Six years of experience at a Tertiary Centre

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Introduction

In our department, EROS for elective caesarean delivery (eCD) was adopted in 2017 and improved patient satisfaction whilst decreasing length of stay[1]. Since then, we have faced multiple challenges including the absence of an EROS lead, diamorphine supply issues and most recently the Covid-19 pandemic. These have led to changes in our practice such as the routine use of intrathecal morphine in 2019. We reviewed the impact of such challenges on the delivery of EROS.

Methods

We audited compliance to EROS protocols as defined by our department over an 8-week period in 2020. We compared our results with data collected over a 6-week period immediately after the introduction of EROS in 2017. We reviewed the impact of the change from the regular use of intrathecal diamorphine (protocol 300-350mcg) in 2017 to intrathecal morphine in 2020 (Protocol dosage 125-150mcg).

Results

The clinical characteristics of women were similar between 2017 and 2020. In 2020, 35% of women felt that the quantity of pre-operative information could be improved. Table 1 shows that our compliance with pre-operative EROS protocols decreased between 2017 and 2020. In contrast Table 2 demonstrates that despite a multitude of challenges we were still able to maintain consistent compliance with the intra-operative and post-operative components of EROS.

	2017	2020	P value
Fasting Time (Clear Fluids) over 6h (%)	10	22	P= 0.027*
Fasting Time (Solids) over 12h (%)	53	76	P=0.0013*

Table 1: Shows the key differences between our performance between 2017 and 2020. Key: *Fisher's exact test

	2017	2020	Significance
Offered/ given a drink with 1h eCD (%)	96	95	ns*
Need for post-operative opiates (%)	83	81	ns*
Mean time to first mobilisation (h)	11.3	10.4	ns**
Mean time to catheter removal (h)	13.3	16.2	ns**
Discharge on post-operative Day 1 (%)	51	50	ns*

Table 2: Shows key areas where our EROS outcomes remained constant between 2017 and 2020. Key: ns=not significant, *Fisher's exact test, **Student T -Test

Discussion

Our compliance with EROS suffered mostly in our pre-operative interventions. We believe the absence of a clear EROS lead contributed to a decline in information delivery prior to eCD. Moreover, in the midst of the covid-19 pandemic, patients avoiding face-to-face appointments may also have had an impact. Since half of our cases were first time eCDs this may have increased pre-operative anxiety. Encouragingly, despite this we found that most of the intra-operative and post-operative tenets of enhanced recovery remained in place. This meant that the percentage of women achieving a discharge on post-operative day one remained consistent at approximately 50%. This is above the national average of 36%[2]. We feel that this demonstrates the impact of string intra- and post-operative EROS processes. We believe that a clear EROS lead and/or champion in all of the multidisciplinary specialties involved would improve the consistency of pre-operative information delivery. In the future, newer interventions, such as EROS information apps and/or videos may facilitate this process better.

References

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2. Secondary Care Analysis, NHS Digital. NHS maternity statistics. 2018-19. Available from:http://digital.nhs.uk/pubs/ maternity1819. [Accessed 8th December 2020]