Evaluating the impact of intrathecal morphine during the COVID pandemic on category 4 caesarean delivery with respect to enhanced recovery outcomes

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Introduction

Enhanced recovery after surgery protocols for elective Caesarean sections (CS) have been in place in our institution since the spring of 2017. The intrathecal opiate of choice was diamorphine, however due to a global shortage this was switched to intrathecal morphine for all elective patients, in the background of a global pandemic. We evaluated whether this switch had any bearing on our ERAS outcomes. In addition, we also looked the consumption of opiates, antiemetics and anti-pruritic. All patients received prophylactic antiemetics intraoperatively. The data was collected across 2 maternity sites at the University Hospitals of Leicester trust, which combined gives one of the biggest maternity units in the country, which serves the Leicester, Leicestershire, and Rutland area.

Methods

We identified the patient population using the Euroking system which yielded 76 patients in our trust across the two maternity sites, 10 of which had to excluded from the analysis due to incorrect coding. The data was collected over the month of January 2021. We interrogated the medical notes and online prescription system to obtain the relevant data. The postpartum opiate use was calculated in mg-morphine equivalents (MMEQ).

Results

The results from the 66 patients were analysed. The results as demonstrated in the results table show rates of discharge and readmission were improved compared to the previous time the audit was done in 2018. The vast majority of those staying as an inpatient for greater than 48 hours due to neonatal reasons. 2 patients required a prolonged stay due to pain and anaemia. 5 patients were noted to have come for back for assessment with the only patient subsequently being admitted as an inpatient. Mean time for requesting first opiate analgesia was just over 5 and half hours with the average opiate requirement over 24 hours being the equivalent of 17mg MMEQ. Only 7 patients required antiemetics and 12 required anti-pruritics. There were no instances where naloxone needed to be administered.

	unit	Pre enhanced recovery march ‘17	Jan ‘18	Jan ‘21
Electives identified		109	90	66
Mean length of stay	hours	67	53	37
Readmissions		11	0	1
Urinary catheter duration	hours	22	11	7
Recatheterisations		0	2	2

Discussion

These results show the switch to intrathecal morphine has not caused a detrimental effect in discharge rates or readmissions following CS. In fact the results show that the time to removal of urinary catheter was shorter and earlier discharge with no increase in readmissions. The opiate consumption is similar to results in other studies where intrathecal morphine was used. The improvements are due to in part greater familiarity of the staff with enhanced recovery protocols and a greater drive during the pandemic for discharge.

References

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