

A tale of two spinals: Does choice of intrathecal opiates at caesarean delivery impact recovery? A three-year, multi-site review.

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Introduction: A transition to intrathecal (IT) fentanyl and morphine in spinal anaesthesia for caesarean delivery (CD) was required due to diamorphine shortages. This may have led to differences in post-operative analgesia, affecting recovery from CD. We assessed the impact on length of stay (LoS) as a marker of recovery.

Methods: Three maternity units were retrospectively studied. Ayrshire Maternity Unit (AMU) uses fentanyl and morphine since swapping in Feb 2022, Queen Elizabeth University Hospital (QEUH) swapped to fentanyl and morphine for two weeks in Feb 2022 and Royal Alexandria Hospital (RAH) never swapped.

The previous three years of CDs were reviewed. Patients who received a general anaesthetic, epidural “top-up” for procedure or had incomplete data were excluded.

A Cox Proportional Hazards model assessed the impact of IT opiate on LoS, adjusting for these confounders:

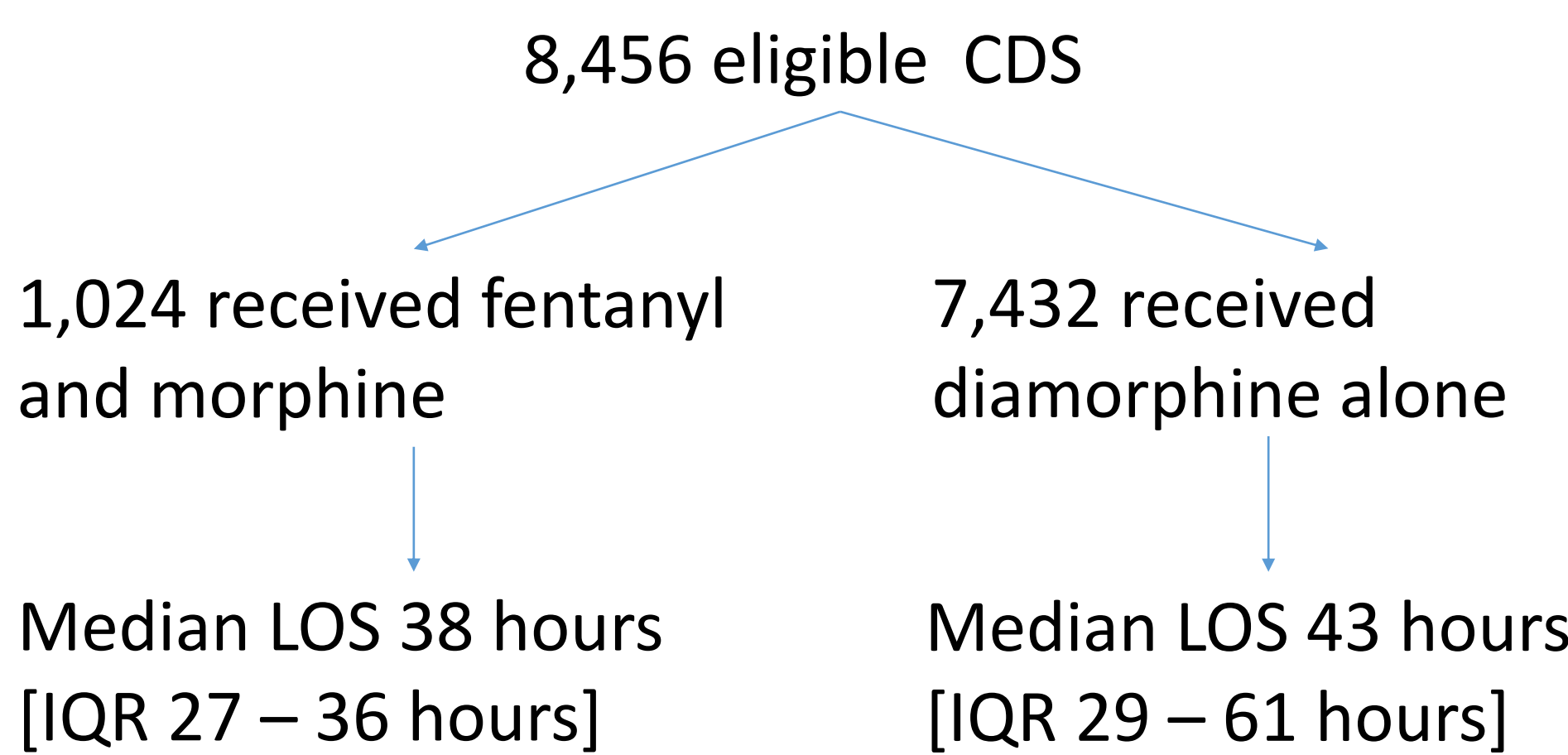
- Age
- BMI
- Estimated blood loss
- Urgency of surgery
- Number of previous caesarean deliveries.

Results: 14,474 CDs in study period of which 8,456 were eligible.

On Cox Proportional Hazards model the hazard ratio was 0.92 [95% CI 0.48 to 1.01, p=0.09]. Indicating those who received fentanyl and morphine were 8% more likely to be discharged home earlier.

Discussion: The multivariate review indicates there is no significant difference between groups.

Anaesthetists, if there are further diamorphine shortages, can confidently use IT morphine and fentanyl as an alternative as recommended by NICE guideline 192 for CD without concern of a negative impact on recovery.



No difference in length of stay in those receiving intrathecal fentanyl and morphine compared to intrathecal diamorphine following caesarean delivery.

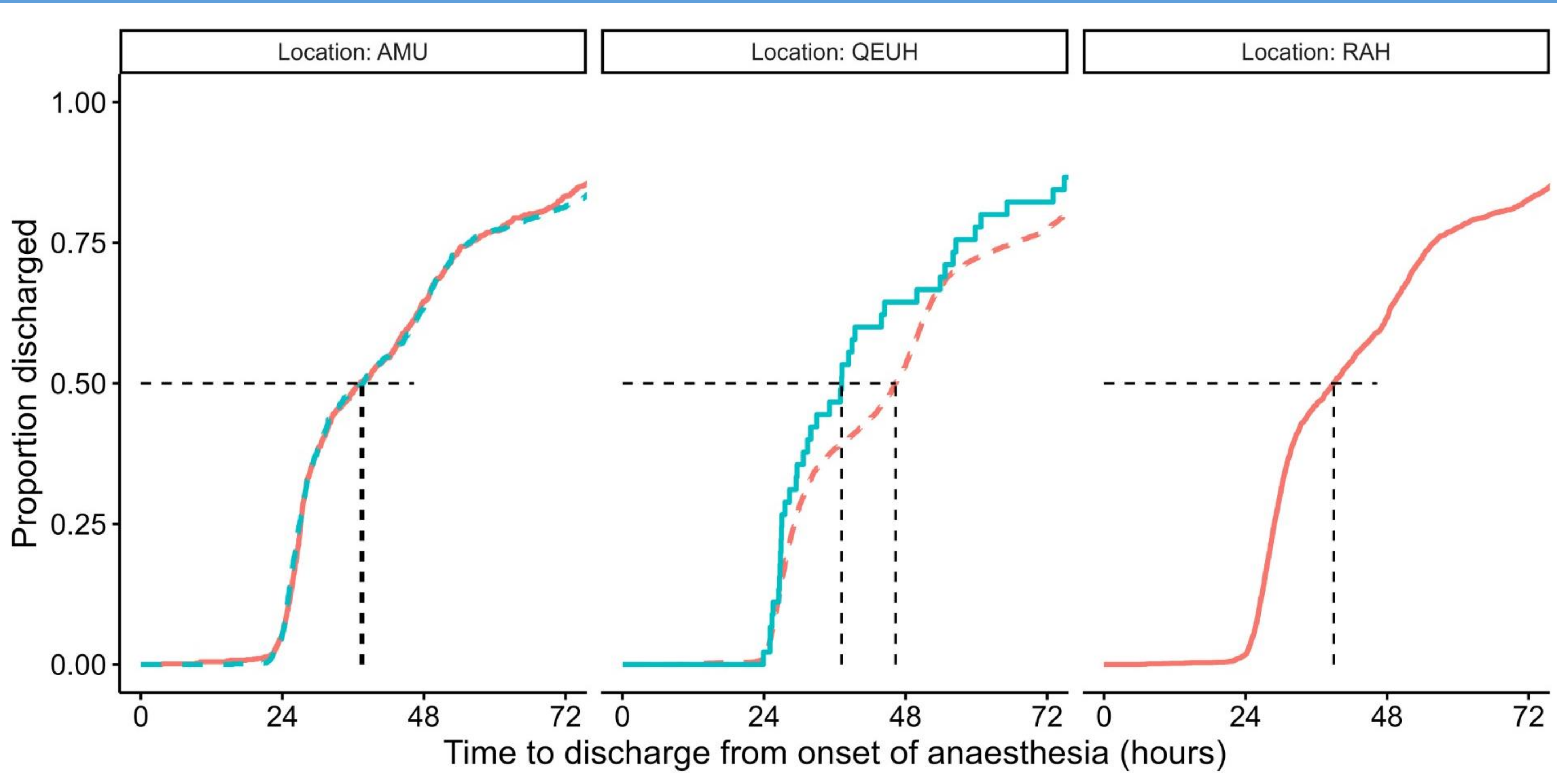


Figure 2: Kaplan Meier curve for length of stay by site and intra-thecal opiate. Fentanyl and Morphine in teal. Diamorphine alone in orange.