A Comparison of Post-Operative Analgesia Requirements in Patients Following Spinal Anaesthesia with Intra-thecal Morphine vs Fentanyl

Background and Objectives: Post-operative pain following LSCS can be very severe and require high dose opiates. In order to lower pain scores and reduce the requirement of breakthrough pain relief, a comparison study was done to investigate if any clinically significant difference existed following administration of intra-thecal fentanyl plus morphine vs fentanyl alone.

Methods: All patients who underwent LSCS at Manly Hospital between January and February 2015 were identified. The primary outcome variable was the amount of breakthrough opiate used in the first 72 hours in both groups. Inclusion criteria was set that all patients received a standardized post-operative analgesic regime and any patients put on a PCA were excluded.

Results: 30 patients were identified who met the inclusion criteria. Of those 30 patients 10 received intra-thecal morphine plus fentanyl and 20 received fentanyl alone. Only 20% of those receiving IT morphine required any breakthrough pain relief in the first 72 hours compared with 80% in the fentanyl group. Furthermore the average amount of breakthrough opiate required was just 15mg oxycodone in 72 hours compared to 23.8mg in those who received no IT morphine.

Discussion: The analgesic requirements in patients receiving intra-thecal morphine plus fentanyl was reduced when compared with those who received intra-thecal fentanyl alone. These results support the hypothesis that an optimal analgesic regime for post operative pain following LSCS should include IT morphine during spinal anaesthesia.