758 Pre-Incisional Infiltration of Local Anaesthetic Is Associated with Reduced Intra-Operative Fentanyl Requirements and Lower Pain Scores in Recovery

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Introduction: Effective pain management is a pivotal component of day-surgical pathways. Intra-operative regional infiltration of long-acting local anaesthetic (LA) has been shown to be efficacious in reducing post-operative pain after general anaesthesia, yet few studies have explored the optimal timing of its use.

Method: Patients undergoing day-case breast/general surgical operations under a single consultant surgeon were randomised to receive LA infiltration (Levobupivicaine) before the initial incision, or during wound closure. All patients were given a propofol-based general anaesthetic. Primary outcomes were intra-operative/post-operative fentanyl requirements, and numerical pain scores (at 1 and 3 hours post-operatively). The study ran from October 2019 but was suspended during the COVID-19 pandemic. Non-parametric statistical tests were used.

Results: 25 patients were randomised. Those receiving pre-incisional LA had lower fentanyl requirements intra-operatively (mean; 150mcg vs 186mcg, p < 0.05) but similar requirements post-operatively. Mean pain scores were lower in the pre-incisional LA group at 1 hour (1.2 vs 2.3, p < 0.05) and 3 hours post-operatively (0.7 vs 1.3, p > 0.4).

Conclusions: Pre-incisional infiltration of LA led to a significantly reduced requirement for intra-operative fentanyl, and significantly lower pain scores at 1 hour post-operatively. Larger studies should interrogate this effect at individual procedure level and assess for differences in rates of chronic pain.