

## LONG ACTING CODEINE v ACETAMINOPHEN/CODEINE IN CHOLECYSTECTOMY PAIN.

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### INTRODUCTION

Following ambulatory surgery, long-acting analgesics may be more beneficial vs. short-acting analgesics. This study compared controlled-release codeine (Codeine Contin<sup>7</sup>, CC, Purdue Pharma) and acetaminophen + codeine (A/C; 300 mg/30 mg) for pain control in the 48-hour period following laparoscopic cholecystectomy.

### METHODS

This study was approved by the hospital research ethics board. Eligible patients were randomized to CC or A/C in a double-blind, double-dummy, parallel group study. Doses of CC and A/C were: Day 1: 150mg q12h and 8 tabs/d; Day 2: 100mg q12h and 4 tabs/d; respectively. Unrelieved pain in hospital was treated with fentanyl IV bolus. Pain (100 mm VAS) was assessed before the first dose of medication; at 0.5, 1, 2, 3, and 4 hours post-dose; at discharge; and 3 times/day for 48 hours. Reported and observed adverse events were recorded. Patient satisfaction, future use and intention to recommend were assessed at 48 hrs.

### RESULTS

84 patients were enrolled in the study; 42 patients in each group. There were no statistically significant differences between CC and A/C treatment. Mean VAS baseline pain was similar in both groups (53.8±10.3 vs. 55.8±13.1, p=0.49). There was no significant difference in the time to onset of analgesia (0.5\_0.0 vs. 0.5\_0.1 hr, p=0.17). At 0.5 hr, the mean VAS pain was significantly reduced from baseline (p=0.0001) in both groups (37.9±10.8 vs. 39.4±20.4, p=0.74). The VAS SPID scores (4 hr) were 93.0±57.5 and 94.0±60.8 (p=0.87) and VAS pain scores at discharge were 22.3±13.6 and 24.5±15.6 (p=0.61). There was no significant difference in the incidence of adverse events between treatments. For CC and A/C, the number of patients reporting adverse events were: nausea: 12, 6; dizziness: 9, 5; constipation: 4, 4; and vomiting: 6, 1. Patients reported similar levels of intention for future use and recommendation of the two treatments. At least moderate satisfaction was reported with CC by 88% of patients, compared to 72% of patients receiving A/C (p=0.17).

### DISCUSSION

Controlled-release codeine provides an equivalent onset of analgesia, reduction in post-operative pain, and level of patient satisfaction, to acetaminophen + codeine, over 48 hours following laparoscopic cholecystectomy, with the advantage of less frequent dosing.