CareSearch Project Research Studies Register: Registration Proforma	0086

Study Title: **A double-blind, dose-ranging study to determine the optimal dose of oral morphine or oxycodone needed to treat breakthrough pain for people on regular opioid in the palliative care setting.**

Brief description of the study:

Background: People who take regular strong pain relieving medications such as morphine or oxycodone (opioids) to treat pain frequently experience episodes of pain between their regular doses of medication. This is called breakthrough pain. Usually, extra doses of morphine or oxycodone are prescribed to treat this pain. These doses are usually a short acting form of the regular medication. The challenge for doctors is to decide how to determine the ideal dose of these medications in order to maximise pain relief and minimise side-effects. The dose is determined by calculating the total daily dose of regular medication taken by the participant, and then prescribing a fraction of this dose. Some doctors prescribe a dose of $1/6^{th}$ of the total daily dose, while others prescribe $1/8^{th}$ or $1/12^{th.}$. There is currently no published literature based on research to guide doctors as to which dose, if any, is best to prescribe. The aim of this study is to determine the breakthrough dose of the commonly used opioids (morphine or oxycodone) that best help breakthrough pain and causes the least side effects.

Study design: The study will ask the participants to take 6 doses of opioids (2 each of 1/12, 1/8 and 1/6 of the total daily dose of opioid) as a breakthrough for the first breakthrough dose of medication taken on any 6 days in a 28 day period. The participant will know that they will take a dose of medication each time, but will not know which specific dose is being taken. Participants will be encouraged to take these extra doses of medications as they normally would. For the rest of the day, participants would take their normal breakthrough medications as prescribed by their doctor. Participants will be asked to complete a pain information form after taking each dose of the study medication and to keep a simple daily diary noting their pain, the medications taken and the pain relief obtained. The participant will finish the study when all 6 doses have been taken or when 28 days have elapsed. Study contact will include a 2 day run-in period using the twice daily diary, and then a weekly visit by the study nurse and a mid-week phone call.

Objectives: To improve the evidence base for pain management in clinical practice by defining the optimal dose of breakthrough opioid, based on background analgesia, by identifying the dose that produces rapid and effective analgesia with the fewest side effects and to better understand the side-effect profile of immediate release opioids in the setting of breakthrough pain.

Outcomes and measures: The primary outcome is analgesia, which will be measured when taking the study dose (T0) and 30, 60 and 120 minutes after a study dose. This will be complemented by descriptive scales for pain and descriptive and VAS scores for pain relief.

Sample Size: Allowing for 25% withdrawal after 3 doses, and 25% who reach 28 days with only 3 doses, we will be required to recruit 138 participants.

Study Methodology: (Please mark with an x which type of study methodology)

	Epidemiology
	Health Services / Health Economics / Quality Improvement
	Qualitative, Observational or Descriptive
	Mixed Method
	Systematic Review
X	Intervention: RCT
	Intervention: Comparative or cohort study
	Intervention: Case series

Project details:

Funding source (Optional): This study has been generously supported by Foundation Daw Park through the Perth Collins award.

Has the study received ethics approval?	**X**	Yes		No		Not applicable
Project starting date: **March 2006**						
Project completion date**: December 2010**						
Multi site:	**X**	Yes		No		Not applicable

RESEARCHERS

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Associated publications / reports: None

Topics

- **Pain and its treatment**
- **Drug trial**