

LOW-DOSE SUBCUTANEOUS KETAMINE FOR POSTOPERATIVE PAIN MANAGEMENT IN SUB-SAHARAN AFRICA: A PILOT DOSE-FINDING STUDY

Introduction: This study took place at Centre Hospitalier Universitaire de Kigali (CHUK), Rwanda, in October 2013. If you participated in this study, we would again like to thank you and share what we found.

Background: Many patients do not receive adequate pain relief after surgery. Usual treatment of pain after surgery in Rwanda is by injections of meperidine (also known as pethidine or Demerol) into your muscle every few hours. This has been shown to provide pain relief after minor surgery, but not after more major surgery requiring admission to hospital. Adding ketamine in low doses can improve pain control after major surgery. Major advantages of ketamine in developing countries are low cost and (usually) reliable supply. This study was done to find the dose of ketamine, that when injected under your skin, was both effective to reduce pain after surgery and did not result in significant side effects.

Results: Thirty-one participants received twice-daily injections of ketamine under the skin for two days after their surgery. Average pain scores in the recovery room and on postoperative days 1 and 2 were 9.39, 5.07, and 2.41, respectively (out of 10).

Conclusion: The average dose of ketamine that was effective to reduce pain without side effects was 0.89 mg/kg.

What we plan to do with our findings: We plan a study to determine how effective injections of ketamine under the skin are at reducing postoperative pain in Rwanda, using a dose of 1.0 mg/kg twice a day.

If you have any questions, please feel to contact us.

Sincerely,

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