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Pain treatment (conservative): Acute pain / perioperative pain – Opioids

MORPHINE SUPPOSITORY VERSUS SUPPOSITORY INDOMETHACIN IN THE MANAGEMENT OF RENAL COLIC: RANDOMIZED CLINICAL TRIAL

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Background and aims: Renal colic is considered as a medical emergency due to the rapid onset and devastating nature of its pain. Opioids and non-steroidal anti-inflammatory drugs (NSAIDs) are both used as first line choices in its management. The aim of this study was to compare the efficacy and safety of opioids and NSAIDs in the management of acute renal colic.

Methods: One-hundred and fifty-eight patients (102 female and 56 male) were divided into two groups (n=79) and received either 10 mg morphine or 100 mg indomethacin suppositories. The severity of pain was measured using verbal numeric rating scale at baseline and 20, 40, 60 and 90 minutes after the administration of analgesics. Drug side effects as well as patients' vital signs were also recorded.

Results: The mean decrease in the pain score during the first 20 minutes after the admission was significantly higher among those who received suppository morphine comparing to those who received suppository indomethacin (5.46 ± 1.34 vs. 4.36 ± 1.62 , $P < 0.001$). However, no significant difference was observed between the two groups regarding the mean decrease in pain score during the first 40, 60 and 90 minutes after the admission. There was no significant difference between the two groups regarding the prevalence of drug side effects or changes in the vital signs.

Conclusions: Morphine suppositories seem to be more efficient in achieving rapid pain relief comparing to their indomethacin counterparts. Hence, morphine remains as a yet irreplaceable analgesic in the management of acute pain among renal colic patients.