EVALUATION OF INTRAVENOUS KETOROLAC TROMETHAMINE AND SOME OPIOIDS BY THE PATIENT CONTROLLED ANALGESIA DEVICE

Thesis Submitted for Partial Fulfillment of the M. D. Degree in Anesthesiology

BY

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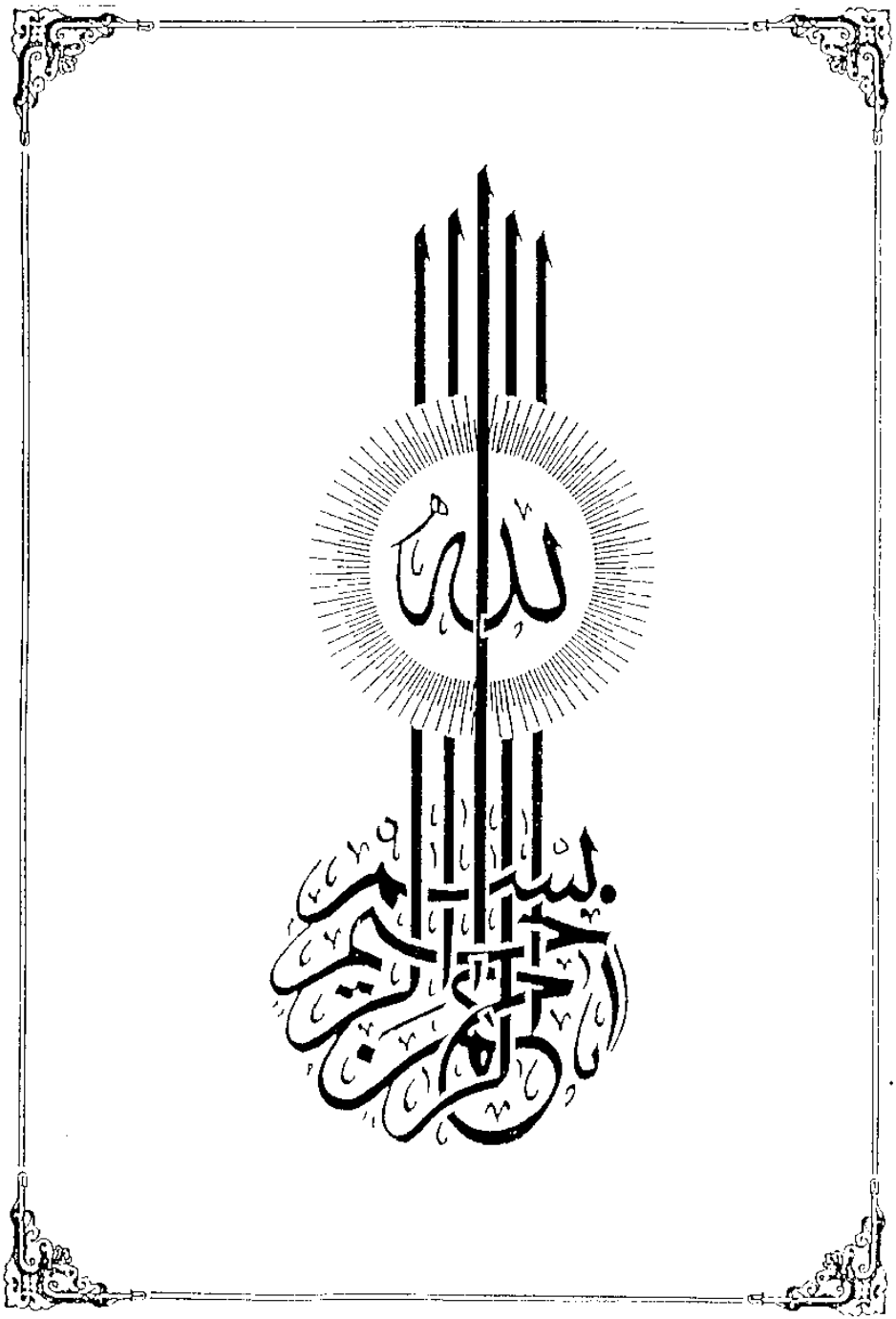

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Samia Abdel-Mohsen

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Introduction

Postoperative pain has multiple adverse effects on different body systems. That is why pain control is very important.

Previously, intramuscular opioids have been the principal method of providing postoperative pain control, but in recent years, alternatives have become popular. Important among these have been epidural, intrathecal opioid administration, and self-administration of opioids by the patient-controlled analgesia (PCA) pumps ***(Ready et al., 1994)***.

More recently, the role of non-steroidal anti-inflammatory drugs (NSAIDs) has gained prominence. Advantages over opioids include a reduction in opioid-related side effects especially respiratory depression, absence of tolerance or addiction potential, and less sedation.

Significant interest has been generated after the introduction of ketorolac, the first NSAID for analgesic use in the United States approved for marketing for parenteral administration ***(Kinsella et al., 1992)***.

Concurrent use of systemic opioids with centrally mediated actions and NSAIDs with peripheral sites of action approves to have advantages over use of either class of drugs alone. It is unlikely that NSAIDs can completely replace opioids in most patients suffering moderate to severe postoperative pain shortly after surgery ***(Kehlet, 1989)***.

Ketorolac is a member of NSAIDs. It is a very potent analgesic which can be given parenterally. Those two important characters give

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ketorolac its role in the treatment of postoperative pain, especially in combination with narcotics.

Patient controlled analgesia (PCA) is a device that gives the patient analgesia by small frequent on-demand doses. Small intermittent intravenous doses of opioids could produce more effective pain relief than traditional intramuscular opioid regimens.

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