COMPARATIVE STUDY BETWEEN CLONIDINE AND MORPHINE FOR EPIDURAL ANALGESIA AFTER CAESAREAN SECTION

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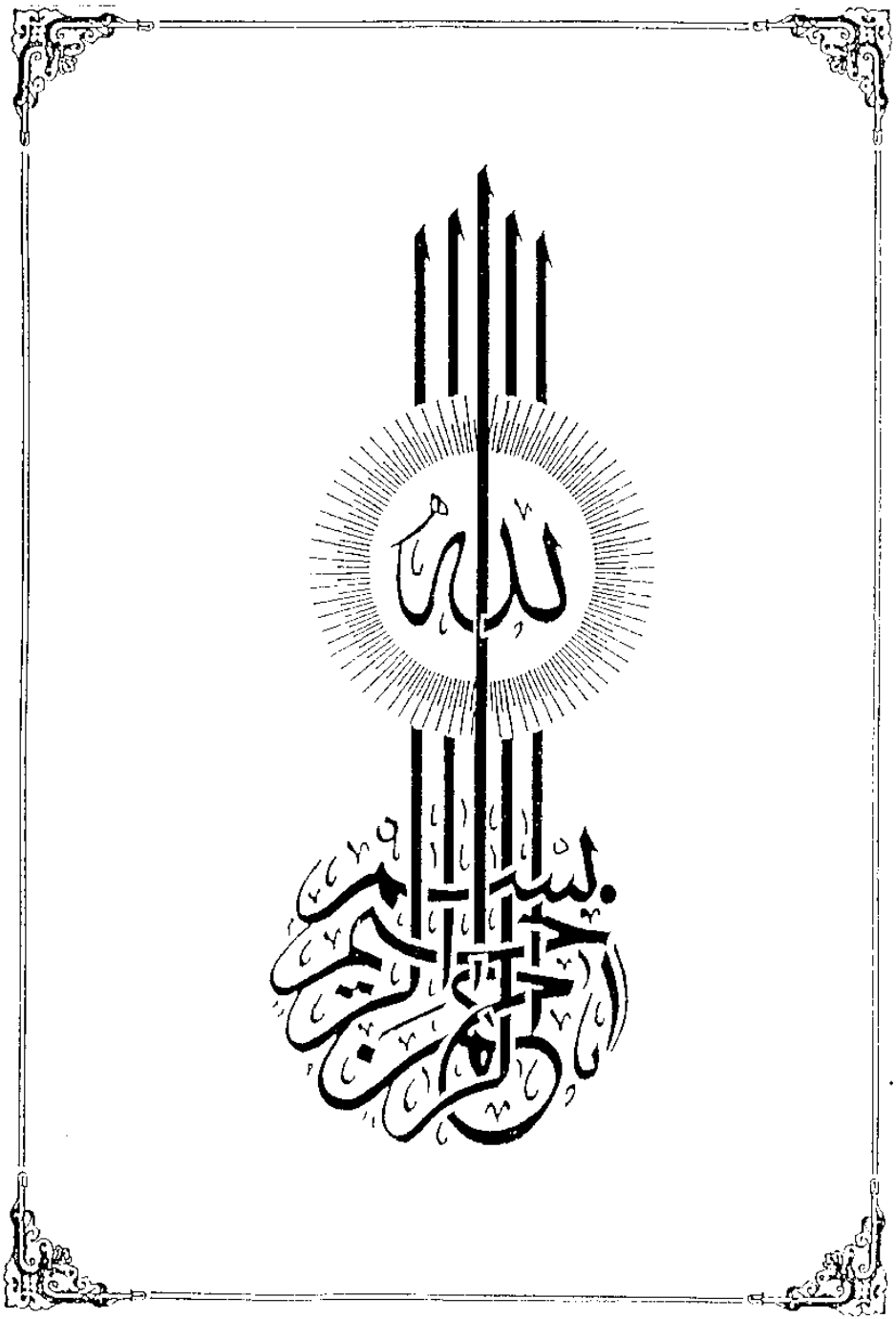

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INTRODUCTION

In recent years, the frequency of caesarean delivery has increased markedly. Although effective pain control is essential for optimal care of such parturients, many continue to experience considerable discomfort (Ready, 1990).

The administration of intramuscular narcotics should no longer be considered routine for postoperative pain management. New alternatives exist which have been repeatedly shown to provide superior analgesia. In addition, decreased morbidity and mortality, improved pulmonary function, earlier ambulation, shorter hospital stays, less medication and greater patient acceptance have all been reported (Rauck, 1990).

Anaesthesiologists are a logical choice to provide pain relief in the immediate postoperative period because they are familiar with pharmacology of analgesia and local anaesthetics, are aware of the short- and long-term effects of drugs given intraoperatively,are knowledgeable about pain pathways and their interruption, and are skilled in techniques available to provide superior pain control (Ready, 1990).

Techniques which have become popular in the past decade include those capable of employing a catheter system. Catheters have been maintained for prolonged postoperative periods (1-7 days) in the epidural space. Which agents exhibit the best qualities for intraspinal (intrathecal and epidural) administration remain unanswered (Rauck, 1990).

Extradural opioid adminstration is now widely accepted for pain relief after caesarean section. The major advantages of this technique include absence of sympathetic block and cardiovascular depression, both of which may occur with local anaethetic spinal block (Cousins and Mather, 1984). Unfortunately, intraspinally administered opioids produce side effects (urinary retention, pruritus, nausea and respiratory depression) and patients may develop tolerance to their analgesic effects (Yaksh and Onofrio, 1987).

In addition to opiate mechanisms, non-opiate spinal cord analgesic receptor systems are currently undergoing clinical investigations. Theoretically, these systems may provide superior analgesia without the side effects or risks of intraspinal opiates. The most extensively studied non-opiate systems have been the alpha-2 agonists

(Rauck, 1990). Clonidine, the prototypical agent in this class, produces dose-dependent analgesia when administered epidurally in patients with postoperative or cancer pain without producing pruritus or respiratory depression. However, sedation, haemodynamic depression and short-lasting analgesia may limit the usefulness of bolus clonidine analgesia in the postoperative period (Eisenach et al., 1989 a and b).

Combinations of drugs are widely used to reduce the therapeutic doses of anaethetic agents as much as possible in an attempt to decrease side effects. So, further studies of combinations of clonidine with opioids are required, as synergistic effects have been postulated to occur with clonidine and morphine (Drasner and Fields, 1988).

AIM OF THE WORK

The aim of this work is to compare the antinociceptive effect of extradurally administered morphine and clonidine (separately and in combination) after caesarean delivery and recording the side effects of each drug.

Review Of Literature

Epidural Space In Pregnancy