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POSTOPERATIVE ANALGESIC EFFECT OF INTRATHECAL MIDAZOLAM AND ITS INFLUENCE ON SPINAL ANAESTHESIA

THESIS
SUBMITTED FOR PARTIAL FULFILMENT OF
MASTER DEGREE IN ANAESTHESIA

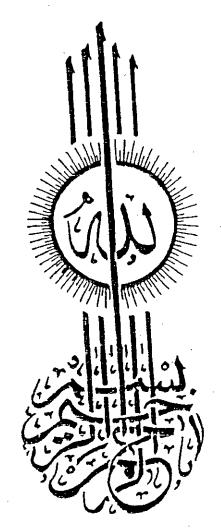
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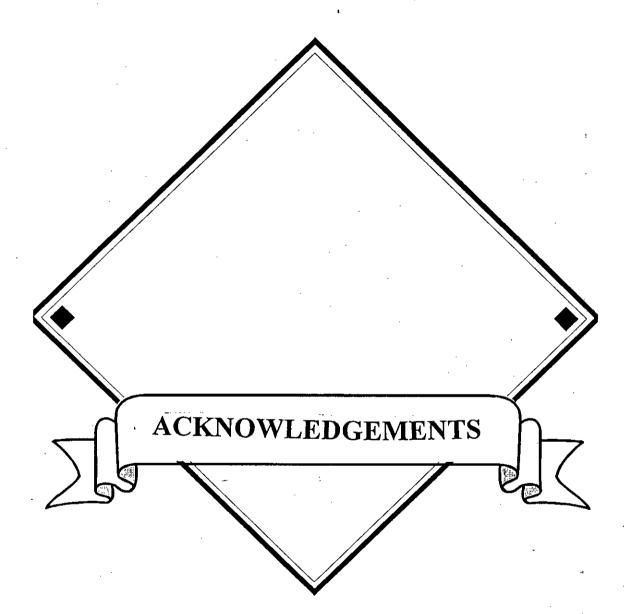
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MY FAMILY

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ACKNOWLEDGMENT

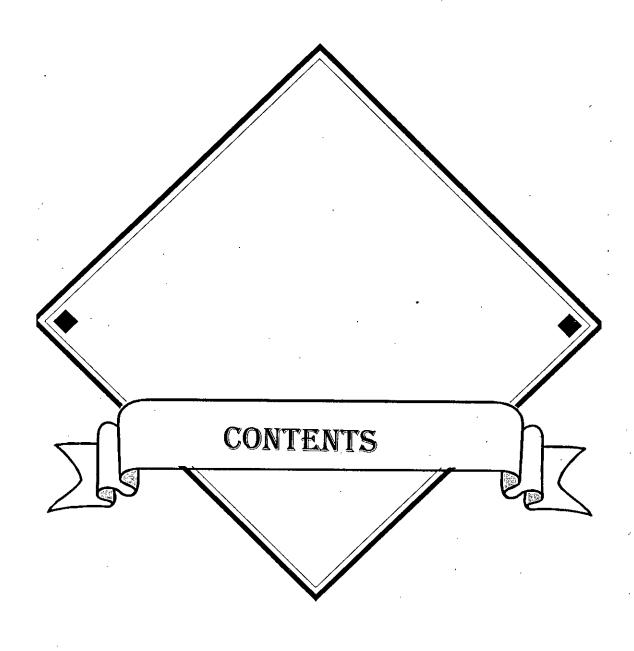
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Gamal Sadek Hakem 2000





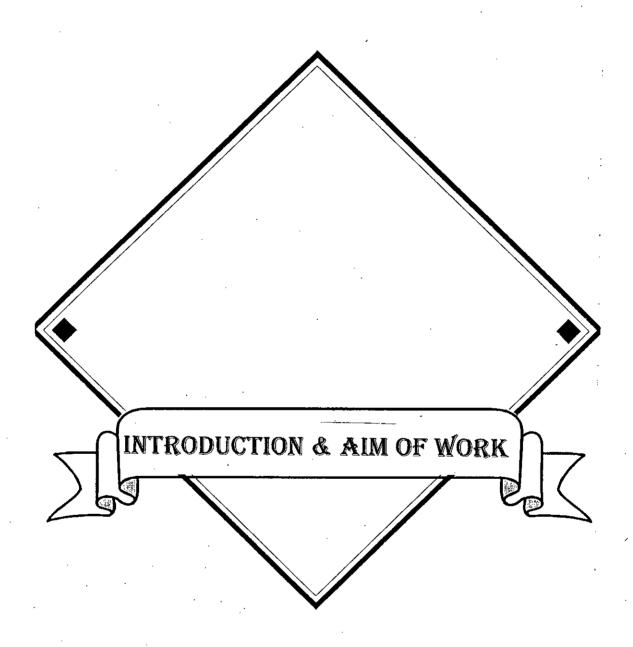
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INTRODUCTION AND AIM OF THE WORK

Both animal and human studies have shown that the intrathecal administration of benzodiazepines has analgesic effect (Niv et al., 1983, Goodchild and Noble 1987, Boulter et al., 1991). Of the clincally available benzodiazepines, only midazolam is water-soluble and its tissue irritability is not significant.

Intrathecal midazolam has been shown to produce anti-nociceptive effect in man (Goodchild and Noble, 1987 and Serrao et al., 1991). Intrathecal and epidural midazolam plus bupivacaine induced significantly better postoperative analgesia than continuous epidural bupivacaine alone or intermittent bupivacaine (Batra et al., 1999 and Nishiyama et al., 1999).

The optimal dose of a single shot or continuous epidural midazolam for post operative analgesia has been studied (Nishiyama et al., 1999). There are still some controversies about the neurotoxicities of spinally mediated midazolam. One study, on rabbit spinal cord showed necrosis, haemorrhage and histological changes (Malinovsky et al., 1991). However, other studies denied the pervious complications (Auroy et al., 1988, Schoeffler et al., 1991, Nishiyama and Hanaoka, 1997).

The aim of the work is:

1- To evaluate the postoperative analgesic effect of midazolambupivacaine mixture in patients undergoing lower limb orthopedic procedures.