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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

يجب أن

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بالرسالة صفحات

لم ترد بالأصل

HOSSAM MAGHRABY

INTRATHECAL MORPHINE VERSUS FENTANYL FOR CESAREAN SECTION: AN ASSESSMENT OF PAIN RELIEF, SATISFACTION AND SIDE-EFFECTS

THESIS
Submitted For Partial Fulfillment Of
Master Degree In Anesthesiology

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ALL THANKS TO

ALLAH

Greatest of all

For the countless gifts

I have been offered

{This work never be crowned

by success without the

blessing of **ALLAH** to whom

my loyalty will remain forever

beyond any compromise}

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M. Farouk Muhammad

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Introduction
And
Aim of the Work

INTRODUCTION AND AIM OF THE WORK

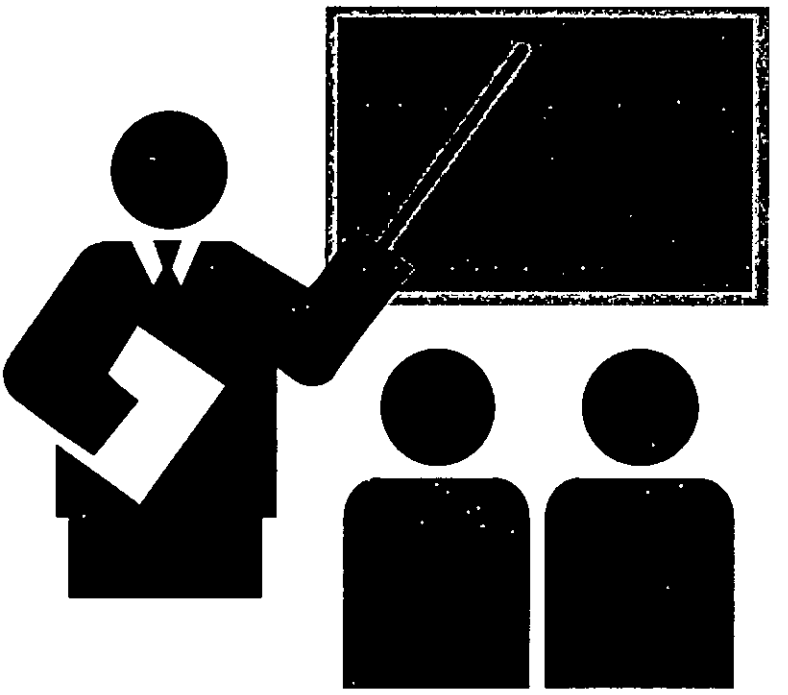
Spinal anesthesia is often used for cesarean section (c.s). Its advantages include the simplicity of the technique, rapid onset of anesthesia and offer a profound and symmetrical sensory and motor block of high quality. One disadvantage with spinal anesthesia using bupivacaine alone is a relatively short duration of action, which means that early analgesic intervention is needed in the post-operative period.

Several reports have shown beneficial effects of adding various opioids to the local anesthetic solution administered intrathecally after discovering of specific opioid receptors in the central nervous system in particular their existence in the spinal cord.

Morphine, a hydrophilic opioid agonist, when administered via the subarachnoid route, provides long lasting analgesia (Abouleish et al., 1988).

Fentanyl, a lipophilic opioid, when added to hyperbaric bupivacaine increases the intraoperative and early postoperative quality of subarachnoid blocks (Randalls et al., 1991).

The aim of this study is to evaluate the postoperative pain after C.S. and to compare the quality of analgesia and incidence of adverse effects of both intrathecal morphine and Fentanyl in patients undergoing elective cesarean section.



REVIEW OF LITERATURE

ANATOMICAL CONSIDERATIONS

The vertebral column (spine):

Forms the central axis of the skeleton. The great strength of the column comes from the size and architecture of the bony elements, the vertebrae, and the raggedness of the ligaments and muscles that hold them together. This great strength is combined with great flexibility, the column is flexible because it has so many joints so close together. Finally the vertebral column contains in its cavity the spinal cord, to which it gives protection (Sinnatamby, 1999). Fig. (1).

The vertebrae are 33 in number, being divided by structural similarity into five regions: cervical (7), thoracic (12), lumbar (5), sacral (5) (fused to form the sacrum) and coccygeal (4) (lower 3 are commonly fused) (Snell, 1995).

The spine is not straight but really a double "C" Curve, with the cervical and lumbar curves being convex in a ventral direction, and the thoracic and sacral curves, convex dorsally. This has practical significance when predicting the effects of gravity or patients position on the movement of spinal anesthetic solutions (Tetzlaff, 1996).

The line joining the iliac crests coincides with L_4 (lumbar) spinous process or L_4-L_5 interspace in 78.6% of cases. Meanwhile, it is as high as L_3-L_4 interspace in 3.7% of cases. (Render, 1996).

The spinal cord is shorter than the vertebral column and ends at the level of the upper border of L_2 as the conus medullaris (Mosenthal, 1995).

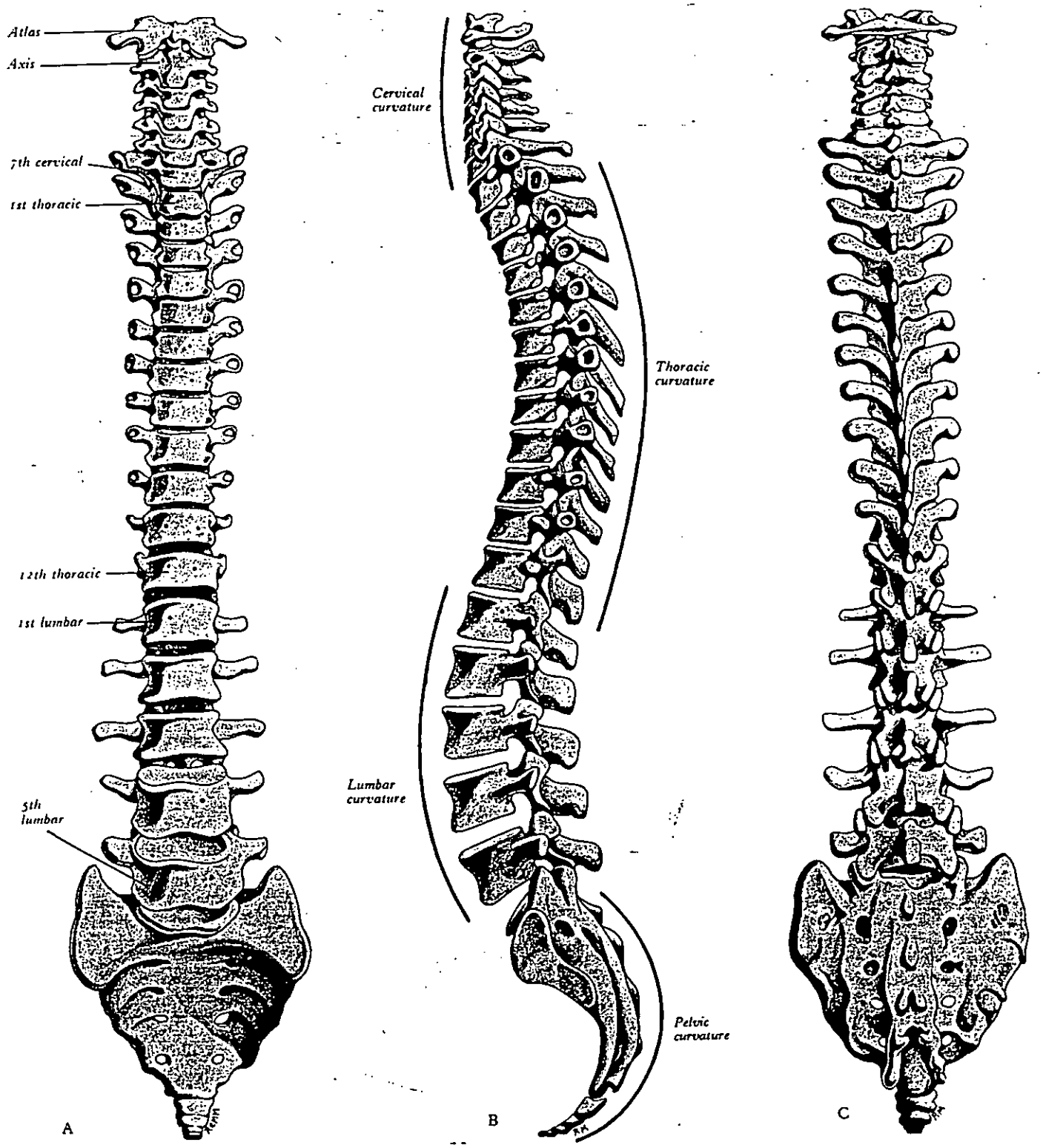


Fig. (1): The vertebral column: A anterior aspect; B lateral aspect (Note curvatures); C dorsal aspect, Note slight sinuous, lateral, thoracolumbar curvature visible from both dorsal and anterior aspects.