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التوثيق الالكتروني والميكروفيلم

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بالرسالة صفحات
لم ترد بالاصل

Assiut University
Faculty of Medicine
Anesthesiology Dept.

Reduction of Occurrance of Hypotension During Spinal Anaesthesia for Caesarean Section : Prophylactic Intramuscular Ephedrine Versus Fluid Preload

Thesis
Submitted for Partial fulfillment of the master degree in anesthesia

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List of abbreviations

ATP	Adenosine triphosphate
Na^+	Sodium ions
K^+	Potassium ions
Cop	Cardiac output
COP	Colloid Osmotic Pressure
UV/m	Umblical vein/ maternal plasma concentrations ration.
CSF	Cerebrospinal Fluid
ANP	Atrial Natriuretic Peptide
CSE	Combined Spinal Epidural anesthesia
CNS	Central Nervous System
HR	Heart Rate
SBP	Systolic Blood Pressure
DBP	Diastolic Blood Pressure
MBP	Mean Blood Pressure
C.S	Caesearn Section
ID	Incision Delivery Time
UD	Uterine Incision Delivery Time
Po_2	Oxygen Tension
Pco_2	Carbon Dioxide Tension
O_2 saturation	Oxygen Saturation
α	Alpha- Adrenoceptor
β	Beta- Adrenoceptor
NACS	Neurologic and Adaptive Capacity Scoring System

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Introduction & Aim of the work

Introduction & Aim of the Work

Spinal anesthesia has been the most common choice for management of the uncomplicated casarean section *(Stuart, 1968)*. Spinal anesthesia for casarean section is associated with an unacceptably high incidence of maternal hypotension despite administration of crystalloid preload and uterine displacement *(Rout et al.,1992a)*. Maternal hypotension is a recognized complication which may compromise the welfare of both motor and fetus *(.Jakson et al., 1995)*.

The incidence of hypotension during spinal anesthesia for casarean section is reported to be as high as 80% *(Yoog and Essat,1982)*. Maternal hypotension is associated with the distressing sympotoms of dizziness, nauseia, vomiting, and also may interfere with surgical procedure .

Lateral uterine displacement using a 15° tilt is essential to prevent the "supine hypotensive syndrome", where the compression of inferior vena cava by the gravid uterus leads to decrease in venous return and subsequent hypotension *(Clark et al.,1976)*. Although fluid preloading is still widely used, its place in the management of hypotension induced by spinal anesthesia has been questioned *(Jakson et al.,1995, and Rout and Rocke1994)*.

The management of choice of this problem is the use of intravenous vasopressors. Ephedrine a mixed acting (Direct and indirect acting) sympathomimetic amine, is probably the vasopressor of choice, it maintains arterial blood pressure by increasing cardiac output and heart rate as a result of its dominant activity on B_1 adrenoceptors. The usual

approach to the use of vasopressors in this clinical setting is reactive rather than proactive "spinal anesthesia induced hypotension occurs, and is then treated accordingly".

Given the frequency with which spinal hypotension occurs, a more logical approach to its prevention may be the administration of prophylactic intra-muscular ephedrine. Intramuscular ephedrine 50mg has been found to be safe for the fetus *(Ayorinde et al., 2001)*.

Aim of the work :

To compare conventional technique of preloading 20ml kg^{-1} normal saline immediately before spinal anesthesia with prophylactic 50mg ephedrine intramusculary 10minutes before spinal anesthesia, on maternal haemodyramic and fetal well being.

Review of Literature