Short term postoperative outcomes of closure versus non-closure of the peritoneum following caesarean section

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Obstetrics & Gynecology

BY

Ayman Hany Ahmed
Resident of obstetrics and gynecology
Faculty of Medicine-Cairo University
(M.B.B.Ch.)

Supervised by:

Prof.Dr.Mohamed Hany Shehata
Professor of obstetrics and gynecology
Faculty of Medicine-Cairo University

Dr.Ahmed Rezk Aly Al Zayat
Lecturer of obstetrics and gynecology
Faculty of Medicine-Cairo University

Faculty of medicine
Cairo University
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بسم الله الرحمن الرحيم

{.. وَأَنزَلَ اللّهُ عَلَيْكَ الْكِتَابَ وَالْحِكْمَةَ وَعَلَّمَكَ مَا لَمْ تَكُنْ تَعْلَمُ وَكَانَ فَضْلُ اللّهِ عَلَيْكَ عَظِيماً }

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List of Contents

List of Abbreviations

APH	Anti partum hemorrhage
ART	Assisted reproductive techniques
BL	Basal Lamina
CAM	Cell Adhesion Molecule
CPD	Cephalo pelvic disproportions
ECM	Extra Cellular Matrix
FDP	fibrin degradation products
ICAM	Intracellular Adhesion Molecule
Ig	Immunoglobulin
IL	Interleukin
IUGR	Intra uterine growth restriction
MCP	Monocyte Chemotactic Protein
MMC	migrating motor complex
MMP	Metalloproteinases
MS	Milky Spots
PA	Plasminogen activator
PAI	Plasminogen Activator Inhibitor
PD	postnatal day
PDGF	Platelet Derived Growth Factor
PMN	Polymorphonuclear neutrophils
SM	Serosal Membranes
TGF-B	Transforming Growth Factor-Beta
TIMP	Tissue Inhibitors of Metalloproteinases
TNF	Tumour necrosis factor
tPA	tissue Plasminogen Activator
uPA	urokinase-like Plasminogen Activator
VCAM	Vascular Adhesion Molecule

List of tables

List of figures

Introduction

INTRODUCTION

Cesarean delivery is defined as the birth of a fetus through incisions in the abdominal wall (laparotomy) and the uterine wall (hysterotomy). **(Cunningham FG. et al., 1997) .**The origin of the term cesarean is obscure, and three principal explanations have been suggested. In the first, according to legend, Julius Caesar was born in this manner, with the result that the procedure became known as the Caesarean operation. The second explanation is that the name of the operation is derived from a Roman law, supposedly created in the 8th century bc by Numa Pompilius, ordering that the procedure be performed upon women dying in the last few weeks of pregnancy in the hope of saving the child. This lex regia "king's rule or law" later became the lex caesarea under the emperors, and the operation itself became known as the caesarean operation. The third explanation is that the word caesarean was derived sometime in the Middle Age from the Latin verb caedere, to cut. The surgical technique for performing caesarean section has changed from time to time; from surgeon to surgeon and these changes were involved both of the uterine and the skin incisions **(FG. Cunningham et al., 2005).** The first successful caesarean delivery on living women was thought to have been performed by **Jacob Nufer** in 1500 AC. Who operated on his wife **(Larry C. et al., 2002).** In 1882, **Max Saenger** introduced the technique of suturing the uterus. He advocated performing a vertical incision in the uterus that avoided the lower uterine segment **(Boley J.P., 1991).** In 1926, A particular important modification was recommended by **Monro Kerr** who preferred a semilunar transverse lower uterine incision with the curve directed upward rather than a longitudinal uterine incision **(Cunningham FG. et al.,1997).** The Kerr technique is the most commonly employed type of caesarean section used

today **(Sewell & Boley, 1993).** Also, the skin incision was undergone a series of changes from a vertical (Midline or paramedian vertical incision) to another transverse incision. The Maylard transverse incision in which, the skin is ordinary incised at least 4cm. above the symphysis pubis involving muscle cutting **(Richard Deep et al., 1993).** ***The Pfannenstiel incision*** in 1900, the skin incision is a transverse upward concavity, typically initiated two fingerbreadths above the symphysis pubis and extended in the direction of the anterior superior iliac spine below and medial to it about 2-3cm. **(Larry C. et al.,2002).**

Kerr, in 1926, described the lower uterine segment transverse incision, for the caesarean delivery (**Kerr JMM., 1926**). Since then both visceral and parietal peritoneal layers have been traditionally closed in separate layers. The proponents of this technique claim that it helps re-establish anatomical relations, reduces the risk of infection, prevents incisional hernia, and prevents adhesion formation (**Duffy DM & Di Zerega GS 1994).** In fact studies have shown many advantages of leaving the peritoneum open after CS as this reduces operating time, the need for postoperative analgesia and improves maternal satisfaction **(RCOG. Guidelines , 2004).**

Aim of the work

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This study will be undertaken to investigate, whether Non-closure of the peritoneum during caesarean section would be beneficial in the terms of short term postoperative out comes in comparison with peritoneal closure or not.

Chapter 1

The peritoneum