



شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية

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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم

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Modified technique for cesarean section A randomized clinical trial

Thesis

*Submitted for partial fulfillment of the master Degree in
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قَالُوا سُبْحَانَكَ لَا عِلْمَ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْحَكِيمُ

(البقرة : آية ٢٢)



All thanks to

ALLAH

**Greatest of all
for the countless gifts I have
been offered**

To:

My dear parents,

My sister,

My brothers,

My dear husband &

My sweetheart Yomna

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INTRODUCTION
AND AIM OF THE WORK

INTRODUCTION AND AIM OF THE WORK

Cesarean section (CS) is a frequently performed obstetrical operation and is a fundamental option in clinical practice (Shampo, 1998). Ever since the first cesarean section was performed, countless variations of the procedure have been introduced. Many small details of the operation as well as major breakthroughs have been introduced. The traditional longitudinal laparotomy is a rapid way to open the abdomen in emergency situations. More than a century ago, Pfannenstiel described a low transverse abdominal incision as an alternative to midline or vaginal incisions (Pfannenstiel, 1897).

Joel-Cohen (1972) introduced a new method for opening the abdomen transversely, which has been further modified by Stark and used for CS (Stark, 1994). The modified technique entails blind entry into the abdomen, single layer closure of the uterine wall and non-closure of the visceral and parietal peritoneum. The operation technique is described thoroughly by Stark (Stark, 1994) and in a well illustrated article by Sjöholm and Holmgren in 1995 (Holmgren and Sjöholm, 1996).

The claimed advantages of the modified technique of CS shown in non-randomized trials are:

- * Less traumatic for the mother with quicker post operative recovery (Federici et al. 1997).
- * Attended with less febrile reactions (Stark and Finkel, 1994; Federici et al., 1997).
- * Less need for antibiotics (Stark et al., 1995).
- * A shorter period before normal bowel function returns (Guedj et al., 1991).
- * Less bleeding in the abdominal wall (Stark, 1994)

* Less peritoneal adhesions and less scarring in the abdominal layers (Stark et al., 1995; (Federici et al.,1997).

* So quick that it can be used for both planned and emergency sections (Federici et al., 1997).

*A method that is easy to learn.

These claims have been tested in a randomized controlled trial. The method was found to be significantly quicker to perform than the conventional method with a reduced amount of bleeding and diminished postoperative pain (Darj and Nordstrom, 1999). On the other hand, Jelsema et al. (1993) found in a retrospective cohort study that single layer closure required additional haemostatic sutures but had decreased operating times. Febrile morbidity, endometritis rates and blood loss, however were similar for single layer closure and classic CS. This report didn't include information about subsequent pregnancies.

Tucker et al. (1993) retrospectively reviewed subsequent deliveries in 292 women who labored after a prior low transverse cesarean delivery. Those with one-and two-layer uterine closures were similar for: scar separation, uterine rupture, adverse perinatal outcome, duration of gestation at birth and birth weight.

With this background in mind, the objective of this study was to determine in a prospective randomized controlled trial whether the modified technique of CS could offer benefits as compared to the conventional method in terms of operative data and postoperative recovery.

The main outcome measures were:

Maternal:

Intra-operative outcome measures including: total operating time, extraction time, number of extra- haemostatic stitches applied over the suture line, number of suture material units used.

Short term post-operative outcome measures including: hours of IV hydration, time of passing flatus, time of beginning of oral feeding, pain score, need for analgesia, time of beginning of mobilization, Hgb level, fever, wound infection and post-partum involution of the uterus.

Fetal:

Apgar score and birth weight.