Incidence of Cesarean Section versus Vaginal Delivery at Kasr Al Ainy Hospital

Thesis

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Abstract

Mode of delivery (vaginal versus caesarean section)

Descriptive study of CS ate at Kasr Alainy hospital

The study includes determinants of caesarean section &detailed analysis of data in tables &charts.

The study includes how caesarean section rate increased & how to reduce caesarean section rate?

Key words

Caesarean - section - delivery - Kasr Alainy hospital

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Dedication

To my father & my mother

I dedicate this woke & degree to you.

No words can describe my thanks & appreciation for your sacrifices & commitment to my education & happiness.

Your big &lovely hearts &continued support continue to be my source of inspiration for excellence & success in my education & personal endeavors

To my husband To my doughter Jana & my son Abd Elrahman.

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List of Abbreviations

ACOG American college of Obestetricians&Gynecologist

BMI Body mass index

C.S Caesarean section

CI Confidence interval

CPD cephalo-pelvic disproportion

CTG Cardiotocography

FHR fetal heart rate

HIV Human imunodeficency virus

HSV herpes simplex virus

ICU Intensive care unit

IUFD intra uterine fetal death

IUGR intra uterine growth restrictionMTCT mother-to-child-transmission

NCC-WCH National Collaborating Centre for Women's and Children's

Health

NCEPOD National Confidential Enquiry into Perioperative Deaths

NICE National Institute for Clinical Excellence

OR odds ratio

PET pre-eclamptic toxemia

PTL Preterm labour

RCT Randomized Control Trials

RCOG Royal college of Obestetricians & Gynecologist

RDS respiratory distress syndrom

RR risk ratio

SCV spontaneous cephalic version

SGA small for gestational age

SOGC Society of Obstetricians and Gynaecologists of Canada

TOL Trial of labour

TTN transient tachypnoea of the newborn

TVS Transvaginal US

VBAC Vaginal birth after caesarean

VD vaginal delivery

VLBW Very low birth weight

Vs versus

WHO world health organization

INTRODUCTION

Cesarean section is a major surgical procedure that increases the likelihood of many types of harm for mothers and babies in comparison with vaginal birth. Short-term harms for mothers include increased risk of infection, surgical injury, blood clots, emergency hysterectomy, intense and longer-lasting pain, going back into the hospital and poor overall functioning. Babies born by cesarean section are more likely to have surgical cuts, breathing problems, difficulty getting breastfeeding going, and asthma in childhood and beyond (*Childbirth Connection 2006*).

Perhaps due to the common surgical side effect of "adhesion" formation, cesarean mothers are more likely to have ongoing pelvic pain, to experience bowel blockage, to be injured during future surgery, and to have future infertility. Of special concern after cesarean are various serious conditions for mothers and babies that are more likely in future pregnancies, including ectopic pregnancy, placenta previa, placenta accreta, placental abruption, and uterine rupture (*Childbirth Connection 2006*).

The caesarean section rate varies from one country to another. It is impossible to determine what an optimal rate for caesarean section should be for any population however there has been arising rate of caesarean section over last 25 years in most of the developed countries (*Savage 2000*).

Over the past few decades, there has been a tremendous rise in the number of C.S. Wide differences occur between countries, regions or even hospitals within the same region with similar socioeconomic profiles and patient characteristics. This suggest that CS is probably often done for non-medical reasons leading to an overall overuse of this surgical obstetric intervention (*Aelvoet et al.*, 2008).

Despite the physical, emotional and economic costs of caesarean section, rates in developed nations continue to increase. Caesarean section rates have been reported at 32% in the United States of America (*Declercq* et al. 2006), 26.3% in Canada (*Canadian Institute of Health Information* 2006), 28.5% in Australia and 22.7% in the United Kingdom (*Fenwick* et al. 2006)

In Egypt, a significant rise in C.S deliveries occurred for all births, from a low of 4.6% in 1992 to 10.3% in 2000. However hospital-based C.S were much higher in 1987-1988 13.9% increasing to 22% in 1999-2000 (*Khawaja et al, 2004*) and increased to 26.2% in 2003 (*Khawaja et al, 2009*).

There are many theories to explain this rise. Causes of rise can be fear of litigation, reluctance to implement the active management of labor, a lowering threshold concerning the decision to carry out a caesarean section, the increase use of the electronic fetal monitoring, the decrease use of forceps and the improved safety of caesarean section (*Peskin & Reine 2002*).

The principle indications for C.S delivery: dystocia 23%, suspected fetal compromise 10.7%, mal presentation 11.7%, prior C.S 26.1% and others 28.5%: placental disorder, multi fetal

gestation, maternal medical physiological conditions (*Department of Health*, *Western Australia*, 2002).

Thirty five percent of C.S currently performed is unnecessary, provide no at least medical benefit for the mother or the newborn, and increase the risk associated with C.S i.e. medically induced prematurely and respiratory disease, and maternal Mortality and morbidity (*Gomes et al.*, 1999).

Recent studies reaffirm earlier World Health Organization recommendations about optimal cesarean section rates. The best outcomes for mothers and babies appear to occur with cesarean section rates of 5% to 10%. Rates above 15% seem to do more harm than good (*Althabe & Belizan 2006*).

It is expected that obstetricians should always provide prompt, competent, skilled, and evidence based services to women. Carefully supervised vaginal delivery after CS needs to be enthusiastically encouraged by promoting trial of scar or trial of labor. Routine practice of external cephalic version is recommended during antenatal period in selected cases of breech presentation (*Mukherjee*, 2006)

The question of seeking a second opinion from a senior and experienced obstetrician before performing a CS for a controversial indication, is ticklish, but may be seriously considered or debated in the best interest of the profession and of the women as well (*Mukherjee*, 2006)

AIMS OF THE WORK

This study was done to assess the incidence of cesarean section versus vaginal delivery at Kasr AL Ainy obstetrics and gynecology Hospital from the 1st June 2007 to 31st December 2008,

To examine the indications, complications for cesarean deliveries and factor which increase the rate of cesarean section and how to reduce and to estimate the maternal morbidity associated with cesarean deliveries in Kasr AL Ainy Hospital.