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

Thesis
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Presented by:
Sedra Abd Elslam Elshaikh
M.B., B.ch.
Resident of Obstetrics & Gynecology
Helwan University

Under supervision of:
Prof. Mostafa Ahmed Shukry
Professor of Obstetrics and Gynecology
Faculty of medicine
Cairo University

Assistant Prof .Amal Salah Elden Darwish
Assistant Professor of Obstetrics and Gynecology
Faculty of medicine
Cairo University

Faculty of medicine
Cairo University
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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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Contents

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.

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 restriction
MTCT	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.