

تقبلت الرسالة بتقدير (90%)
في يوم الثلاثاء ١٩٩٢/٥/٢٦

DELIVERY AFTER PRIMARY CAESAREAN SECTION

Thesis

submitted for partial fulfilment
of the Master Degree in
OBSTETRICS and GYNECOLOGY

By

DR. IBRAHIM ABDEL AZIM SARHAN
M.B.B.Ch.

Supervised by

Dr. ALAA ELDIN MOHAMMED EL-ETRIBY
Ass. Professor of Obstetrics and Gynecology
Ain-Shams University

Dr. KHALED MOHAMMED AZIZ DIAB
Lecturer of Obstetrics and Gynecology
Ain-Shams University

**FACULTY OF MEDICINE
AIN-SHAMS UNIVERSITY**

1992

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



ACKNOWLEDGEMENT

*First of all, praise be to **ALLAH** who has guided us to this, never could it be done without the help of **ALLAH**.*

*I would like to express my sincere gratitude, deepest thanks and appreciation to my **Dr. ALAA EL-DIN MOHAMMED EL-ETRIBY**, Assist. Professor of Obstetrics and Gynecology, Faculty of Medicine, Ain- Shams University, this is not only for his keen, precise and ideal supervision of this thesis, but also for his continuous support, encouragement and help.*

*I am also greatly indebted to **Dr. KHALED MOHAMMED AZIZ DIAB**, Lecturer of Obstetrics and Gynecology, Ain-Shams University, for his kind and keen supervision throughout the entire period of this piece of work.*

*I am sincerely grateful to **Dr. HISHAM M. MAHABA**, Lecturer of Community Medicine, Ain-Shams University, for his kind performance of the statistical analyses.*

TABLE OF CONTENTS

Chapter	Page
LIST OF TABLES AND FIGURES	
I	INTRODUCTION 1
II	AIM OF THE WORK 3
III	REVIEW OF LITERATURE 4
	Caesarean section scar 4
	❑ <i>Type of caesarean section scars</i> 4
	❑ <i>Healing of caesarean section scars</i> 6
	❑ <i>Evaluation of caesarean section scars</i> 11
	° History taking 11
	° Clinical examination 19
	° Investigations 23
	Management of parturient with previous one caesarean section . . 30
	❑ <i>Changing trends in the management</i> 30
	❑ <i>Patient selection and criteria for trial of labour</i> 36
	° Favourable factors for trial of labour 36
	° Unfavourable factors for trial of labour 37

Chapter	Page
▣ <i>Conduction of labour</i>	39
◦ Points of general agreement	39
◦ Progress and duration of labour	41
◦ Points of controversy	42
◦ Incidence of vaginal delivery after trial of labour	63
▣ <i>Complications of trial of labour after prior caesarean section</i>	69
IV SUBJECTS AND METHODS	79
V RESULTS	82
VI DISCUSSION	112
VII SUMMARY AND CONCLUSIONS	128
VIII REFERENCES	134
ARABIC SUMMARY	

LIST OF TABLES AND FIGURES

Table	Page
1 Frequency Distribution of the Studied Retrospective (Group I) and Prospective (Group II) Cases According to Mode of Delivery	84
2 Frequency Distribution of the Studied Retrospective (Group I) and Prospective (Group II) Cases According To Age	86
3 Frequency Distribution of the Studied Retrospective (Group I) and Prospective (Group II) Cases According To Parity	87
4 Frequency Distribution of the Studied Retrospective (Group I) and Prospective (Group II) Cases According To Gestational Age, Twin Pregnancy and Presenctation Part	88
5 Frequency Distribution of the Indications of Repeated Abdominal Deliveries without Trial of Labour in the Studied Retrospective (Group I) and Prospective (Group II) Cases	89
6 Frequency Distribution of the Outcome of Trial of Labour in the Studied Cases According To Age	92
7 Frequency Distribution of the Outcome of Trial of Labour in the Studied Cases According To Parity of Parturients with Previous One Caesarean Section	93
8 The Effect of Previous Vaginal Deliveries on Subsequent Trial of Labour	94

9	The Effect of the Indication of Previous Caesarean Section on the Outcome of Trial of Labour	96
10	The Effect of Gestational Age and Birth Weight on the Outcome of Trial of Labour	97
11	The Presentation in Relation to the Mode of Delivery Among Patients with Previous One Caesarean Section	101
12	The Effect of Cervical Dilatation on Admission on the Outcome of the Trial of Labour	103
13	The Effect of State of Membrane on Admission on the Outcome of the Trial of Labour	104
14	Method of Vaginal Delivery in the Studied Cases	107
15	Maternal Complications in the Studied Cases	109
16	Perinatal Mortality in the Study Groups	111
Fig.1	Mode of delivery of twins in the studied cases	99
Fig.2	Mode of delivery of breech presentations in the studied cases	100

I INTRODUCTION

INTRODUCTION

One of the oldest controversies in the field of obstetrics is the optimal management of the pregnant patient with a previous caesarean section. Why has this controversy become so heated in the past few years? The main reason is undoubtedly the sky-rocketing caesarean section rate which has increased by about 300% in the last decade (Flamm, 1985).

Once a caesarean section, always a caesarean section was first proposed as a clinical dictum by Craigin (1916). This dictum dates back to an era when most caesarean sections involved classical uterine incision and when antibiotics and transfusions were unknown (Saldana et al., 1979).

Now, due to changes in the type of uterine incision being mostly lower segment transverse, combined with advances in technology which allows continuous and accurate monitoring of the mother and the fetus, it is widely accepted that an attempt at vaginal delivery should be made unless there is other indication for abdominal delivery (Graham, 1984).

A recent American College of Obstetricians and Gynaecologists Committee recommended that the concept of routine repeat caesarean birth should be replaced by a specific indication for a subsequent abdominal delivery and in the absence of a contraindication, a woman with one previous

caesarean delivery with a low transverse incision should be counseled and encouraged to attempt labour in her current pregnancy (Kirk et al., 1990).

The greatest problem for the attendant is the integrity of the uterine scar. Uterine rupture has the potential for serious harm to the parturient and the fetus (Horowitz et al., 1981).

The risk of uterine rupture in patients who have previously undergone caesarean section and are allowed a trial of labour is low and not severe enough to deny the patients' vaginal delivery with its well-known advantages. Furthermore, a rupture of a lower segment scar is usually recognized and should not increase fetal risk, if appropriately managed (Nielson et al., 1989).

However, controversy remains as to which patients should be excluded from trial of labour based on previous repetitive indications, more than one uterine scar, type of previous uterine incision, or febrile morbidity during the healing of previous uterine scar (Jarrell et al., 1985).

II AIM OF THE WORK

AIM OF THE WORK

The aim of this work was to evaluate the prevalence of parturients with previous single caesarean section, seen at Ain Shams University Hospital. Also, to evaluate their method of delivery, factors which are related to the the success of the trial of labour, and the incidence and sequelae of gapped scar occurring in these women.

III REVIEW OF LITERATURE

CAESAREAN SECTION SCAR

TYPES OF CAESAREAN SECTION SCARS

Caesarean section (C.S) scars are differentiated according to the location and direction of the uterine incision, which are divided into two major types and other rare varieties:

1. UPPER UTERINE SEGMENT INCISION:

They include the following subtypes:

- *Vertical incision*: which is the classical incision.
- *Transverse incision*: which is rarely used nowadays and was originally known as (Kherer's incision).

2. LOWER UTERINE SEGMENT INCISION:

Where the bladder is displaced downwards to expose the appropriate area of the lower uterine segment. They include the following subtypes:

- *Transverse incision (Kerr)*: which is the most frequently used incision nowadays.