

**Comparative Study Between Different Regimens
for Placental Delivery in Mid Trimestric
Abortion**

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بسم الله الرحمن الرحيم

”قالوا سبحانك لا علم لنا
إلا ما علمتنا إنك أنت العليم
الحكيم”

صدق الله العظيم

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Aim of the work

The aim of this study is to compare the effectiveness of three methods for the management of placental delivery in second-trimester medical termination of pregnancy (from 14-24 weeks gestation).

Introduction

Second trimester deliveries are frequently incomplete and associated with retained placenta and hemorrhage (*Bivins et al., 1993 and Carlan et al., 1997*).

Either complete or incomplete is an area of clinical concern, although there have been few formal studies published on the management of the third stage in medical abortion.

(*Carlan et al., 1997 and Leader et al., 2002*).

Placental retention rates vary from 8-80% (*Von Hertzen et al., 2009 ; Dickinson et al., 2009; Bhattacharjee et al., 2008 and Rodger et al., 1990*). And if the placenta fails to deliver spontaneously, exploration of the uterus manually or with surgical instrument is necessary. These procedures may require general anesthesia, with the added risks of uterine perforation, hemorrhage, infection and synechia (*Schen Ker et al., 1982*).

The upper time limit for defining 'retained placenta' is usually between 15 and 30 minutes after the birth of the baby. However in many trials the limit was not exactly defined (*Bider et al., 1991*).

Oxytocin acts directly on the myometrium to separate the placenta (*Carrolli., 2001*).

The use of prostaglandin is established as a technique for

second-trimester pregnancy termination, particularly in circumstances of fetal abnormality in which pathology of the fetus may be required. There are many publications on the routes of administration and dosage regimens for prostaglandin, either alone or after priming with mifepristone (***Lalitkumar et al., 2007 and Ashok et al., 2004***).

An earlier study concluded that serial 15- methyl prostaglandin (PG) F_{2α} injection at doses of 250 ug every 20 minutes reduced the length of the third stage of the labor in second-trimester deliveries by half. This regimen, however, is expensive, requires increased nursing and pharmacy attention, is only available for parenteral administration, and cannot be used in women with history of asthma (***Carlan et al., 1997***).

Misoprostol is a PGE , analogue that has uterotonic properties at all gestational ages, is inexpensive and is easy to administer (***el- Rafaey et al., 1997 and Hofmeyr et al., 1998***).

Recent studies confirm misoprostol's efficacy to decrease blood loss in term third stage of labor patients and rectal administration has been used to treat a retained placenta in a second-trimester delivery (***Li et al., 2001***).

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List of Abbreviations

AEPs	Abnormal early pregnancies
APS	Antiphospholipid syndrome
ACA	Anticardiolipin antibodies
D & C	Dilatation & curettage
IUFD	Intrauterine fetal death
EVA	electric vacuum aspiration
ERPC	Evacuation of retained products of conception
Hb	Heamoglobin
LPD	Luteal phase defect
MVA	Manual vacuum aspiration
NK	Natural killer cells
NSAIDs	Non steroidal anti inflammatory drugs
PGs	Prostaglandins
RSA	Recurrent spontaneous abortion
SSK	Social security agency
SE	Suction evacuation
TPO	Thyroid peroxidase
TOP	Termination of pregnancy
FHR	Fetal heart rate

CEACAM1	Carcinoembryonic antigen-related cell adhesion Molecule 1
OCT	Oxytocin challenge test
RR	Relative risk
CRH	Corticotrophin releasing hormone
CS	Caesarean section
PPH	Post partum Haemorrhage
AAV	Adeno associated virus
WHO	World Health Organization
HIV	Human immunodeficiency virus
HCMV	Human cytomegalovirus
HPV`	Human papilloma virus
PCR	Polymerase chain reaction
VA	Vacuum aspiration
D/E	Dilatation , evacuation
TOP	Termination of pregnancy
CRH	Corticotrophin releasing hormone

Abortion

Early pregnancy failure is a major public health problem throughout the world. Although approximately 15% of all pregnancies end in spontaneous miscarriage, there are also an estimated 46 million induced abortions annually. Many of these are performed illegally in unsafe situations resulting in approximately 78,000 deaths annually worldwide, with the majority of these deaths occurring as a result of septicemia and hemorrhage. In addition, many more women suffer long-term morbidity from pelvic infection, uterine perforation and anemia (*Weeks A et al, 2005*).

Abortion is the termination of pregnancy, either spontaneously or intentionally, before the fetus develops sufficiently to survive. By convention, abortion is usually defined as pregnancy termination prior to 20 weeks gestation or less than 500g birthweight. (*Cunningham et al, 2010*).

Second trimester, or mid-trimester, is a period ranging from 13 to 28 weeks of gestation, which again is subdivided into an early period between 13 and 20 weeks and a late period between 20 and 28 weeks. (*Lalitkumar, et al 2007*).

TOP by induced abortion is practiced world wide . Induced abortion , either elective or therapeutic termination of a viable pregnancy, is one of the most ancient procedures. Of the