Research Article

Cases of placenta accreta at El-Minia Maternity university hospital from March 2017 to February 2018 (Prospective study)

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Abstract
Introduction: The placenta is a temporary organ that joins the mother and fetus and transfers oxygen and nutrients from the mother to the fetus. **Aim of the work:** The aim of this work is to review our experience with placenta accreta and evaluate the conservative management strategies and the associated reduction in maternal morbidity and mortality. **Patients and Methods:** This interventional study was carried out at the department of obstetrics and gynecology, Minia maternity university hospital during the period from March 2017 to February 2018**. Results:** This is a prospective study that was conducted in maternity unit of Minia University Hospital during the period from March 2017 to February 2018. Discussion: Morbidly adherent placenta (MAP) is the abnormal adherence of either wholly or partially to the underlying uterine wall. It is a life-threatening complication of pregnancy. **Summary and Conclusion:** Placenta accreta is an extremely serious complication in pregnancy.
Keywords: ACOG: American college of Obstetricians and gynecologists, **ALARM**: dvances In Labour and Risk Management, **ANC**:Ante Natal Care.

Introduction
The placenta is a temporary organ that joins the mother and fetus and transfers oxygen and nutrients from the mother to the fetus. The placenta is disk-shaped and at full term measures about seven inches in diameter. The placenta attaches to the wall of the uterus

Placenta previa is the most common cause of painless bleeding in the later stages of pregnancy (after the 20th week). Placenta previa is a complication that results from the placenta implanting either near to, or overlying the cervix. Because the placenta is rich in blood vessels, if it is implanted near the cervix, bleeding can occur when the cervix dilates or stretches .There are several types of placenta previa: (1): A low-lying placenta is near the cervical opening but not covering it. It will often move upward in the uterus as the due date approaches.(2): A partial placenta previa covers part of the cervical opening. (3): A total placenta previa covers and blocks the cervical opening(Williams et al., 2014).

The changing landscape of obstetric care elsewhere in the world has brought new challenges to our practice. As well as the changing demographics of women who become pregnant, the steady rise in the rate of cesarean sections means we will encounter more complex forms of placentation, including placenta previa and placenta accrete.

Morbidly adherent placenta (MAP) is the abnormal adherence of the placenta either wholly or partially to the underlying uterine wall. It is considered the 20th century iatrogenic uterine disease. It is a life-threatening complication of pregnancy. Placenta previa accreta is among the greatest treatment challenges in modern obstetrics. It is a major cause of maternal mortality and morbidity. The optimal management of this condition necessitates a multidisciplinary team approach headed by the obstetrician involving the anesthetist, diagnostic and interventional radiologist, haematologist, urologists, gynecological oncolo-gists, vascular surgeons, and

neonatologists. Early diagnosis and advance planning is the key to minimising complications (Crane et al. 1999)

Aim of the work

The aim of this work is to review our experience with placenta accreta and evaluate the conservative management strategies and the associated reduction in maternal morbidity and mortality.

Patients and Methods

I- Setting:

This interventional study was carried out at the department of obstetrics and gynecology, Minia maternity university hospital during the period from March 2017 to February 2018.

II- Funding:

This project was locally funded from Minia University as a part of covering the expenses of the candidate and carried out under shared supervision between. Prof. Dr / Mohamed Hany Mosabeh, Dr/ Momen Mohamed Mohamed Hassan, Dr. Ahmed Rabie Abd El-Raheim, using the equipments in the department.

III- Ethical issues:

The ethical committee of the department of Obstetrics & Gynecology at Minia College of medicine approved the study (Registration No: MUEOG0001)

All Participants had signed a written informed consent after they have been made aware of the purpose of the study, interventions, outcome and possible complications.

IV- Plan of the study:

In this study we have following patients diagnosed with placenta accreta antenatally and scheduled for different cases of placenta accreta with different modalities of managment either (Cesarean hysterectomy, LSCS with cervical inversion and/or intra uterine tamponading, leaving placenta in situ followed by operative management or leaving placenta in situ followed by medical treatment**)**

Evaluation of all patients involved:-

*****proper history taking as Patient's name, Age, Gravidity, Parity, Last normal menstrual period, Expected date of delivery, Period of gestation, Past obstetric history, Gynecological history, Past medical history and Past surgical history.

***General examination**

General appearance, Vital signs(pulse, temperature and blood pressure) , Head examination, Hands examination, Nails examination & General Systems Review. Weight and height were also recorded to calculate BMI.

***Abdominal examination**

Inspection: general inspection, hands, arms, axilla, eyes, mouth, neck, chest, scars, masses, pulsation, striae.

Palpation: tenderness, guarding, masses

Percussion: abdominal organs, shifting dullness

Auscultation: bowel sounds, bruits.

Results

This is a prospective study that was conducted in maternity unit of Minia University Hospital during the period from March 2017 to February 2018. The study includes 102 cases, those cases attended to our university hospital and diagnosed as placenta accreta with history of previous uterine surgery mostly previous cesarean section

Table 1: Demographic parameters of the study

Descriptive statistics of the study parameters		N=102
Age	Range	(23-39)
	Mean ± SD	29.9±4.2
Residence	Urban	34(33.3%)
	Rural	68(66.7%)
Parity	1-2	42(41.2%)
	3-4	46(45.1%)
	≥ 5	14(13.7%)
Previous cesarean sections	1	18(17.6%)
	2	30(29.4%)
	3	36(35.3%)
	4	18(17.6%)
History of placenta previa	No	68(66.7%)
	Yes	34(33.3%)
preoperative Hb level (gm%)	Range	(10.1-12.5)
	Mean ± SD	11.3±0.5
Pre operative platelets level (1000/cm3)	Range	(145-315)
	Mean ± SD	228±42.8

This table represents Demographic parameters of the study (Age, Residence, parity, previous cesarean sections, History of placenta previa, pre operative Hb level (gm%), pre operative Platelets level (1000/cm3))

Discussion

Morbidly adherent placenta (MAP) is the abnormal adherence of either wholly or partially to the underlying uterine wall. It is a life-threatening complication of pregnancy. MAP is classified according to the degree of penetration of chorionic villi and by the area of placental involvement, into 3 types i.e placenta accreta, increta and percreta depending on varying degrees of attachment of anchoring placental chorionic villi into the uterine myometrium. In placenta accreta, there is invasion of deciduas basalis and superficial penetration into the myometrium whereas in its extreme and rarest form as placenta percreta, penetrating deep through the myometrium up to the serosal surface and may even involve adjacent organs like urinary bladder, pelvic peritoneum and bowel. Various case reports of uterine rupture due to placenta accreta are available. (Chen et al., 2011).

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