

## Abdelgafor I. EMERGENCY PERIPARTUM HYSTERECTOMY : 1 YEAR STUDY

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### ABSTRACT

**Objectives** : The objectives of this study were to evaluate the incidence ,risk factors , indications, outcome and complications of emergency peripartum hysterectomy. **Study design** : This is a retrospective analysis of 34 cases of emergency peripartum hysterectomy performed between January 2009 and December 2009 at the Obstetrics emergency hospital of Zagazig University. **Results**: There was total 34cases of emergency peripartum hysterectomy, with the incidence of 1per 250 deliveries.The most common indication for hysterectomy was uterine atony (47%) followed by uterine rupture (20%).The most common postoperative complications were fever, wound infection and DIC .There is 3 maternal mortalities and 18 maternal morbidities and 7 perinatal mortalities. **Conclusion** : Frequency of emergency peripartum hysterectomy ,maternal mortality ,maternal morbidity and perinatal mortality were high in this study .This can be explained by that ,our hospital is a referral for many hospitals ,the medical staff work at these hospitals are in need to expand their practice of conservative and curative measures of many Obstetric emergencies .

**Key Words** : emergency , peripartum , hysterectomy , indications , outcome .

### INTRODUCTION

Emergency peripartum hysterectomy is one of the live saving procedures performed after vaginal delivery or caesarean birth or in the immediate post partum period in intractable hemorrhage <sup>1</sup>. Emergency peripartum hysterectomy is associated with severe blood loss , risk of transfusion , intra operative complications and significant post operative morbidity and mortality <sup>2</sup> . The high morbidity and mortality is reported in developing countries.

The first successful caesarean hysterectomy in which both mother and infant survived dates back to 1876 , which was performed by Dr .Eduardo Porro from Pavia , Italy <sup>3</sup>. The purpose of this study was to review the incidence , indications , risk factors and complications of peripartum hysterectomy over 1 year .

**Methods**  
This retrospective study was carried out in the Obstetrics emergency hospital of Zagazig University between January 2009 ,and December 2009 All cases who underwent peripartum hysterectomy were

identified from labour ward and operating room records and intensive care unit registrations. The medical record sheets of all patients were reviewed regarding the maternal age , parity , antenatal booking status gestational age at time of delivery , mode of delivery , indications for peripartum hysterectomy, peripartum complications , and maternal morbidity and mortality . all data analyzed using SPSS .

### RESULTS

Over the study period , 34 emergency peripartum hysterectomy were carried out at Obstetrics emergency hospital of Zagazig University .during this period total 8,528 deliveries including 2,116 caesarean deliveries and 6,412 vaginal deliveries.

The incidence of emergency peripartum hysterectomy was 1 per 250 , the mean age of patients was (30.9±5.0) , the mean parity was (3.52±1.8) ,the mean gestational age at delivery was (37±4.3) , the unbooked patients was 20 (59%) ,24 (71% ) patients delivered vaginally and 10 (29%) by caesarean section .Table (1) The main indication for emergency peripartum

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hysterectomy was uterine atony in 16 cases (47%) ,the second common cause for hysterectomy was uterine rupture in 7 cases (21%) . Then placenta accrete in 6

cases (18%) ,un repairable cervical tear in 3 cases (9%) ,lastly placenta previa in 2 cases (6%) Table 2.

**Table (1).** Patients characteristics

Age in years	number	percentage
20-27	15	44%
28-35	12	35%
36-40	7	21%
Parity		
1-3	14	41%
4-6	13	38%
>6	7	21%
Gestational age at time of delivery in weeks		
28-36	6	18%
37-40	27	79%
>40	1	3 %
Mode of delivery		
Vaginal	24	71%
Caesarean section	10	29%
Antenatal booking		
Booked	14	41%
Unbooked	20	59%

**Table (2)** .Indications for peripartum hysterectomy

Aetiology	Number	Percentage
Uterine atony	16	47%
Rupture uterus	7	21%
Placenta accrete	6	18 %
Un repairable cervical tear	3	9%
Placenta previa	2	6%
Type of hysterectomy		
Total	10	29%
Sub total	24	71%

Total hysterectomy carried out for 10 cases (29%) ,and sub total hysterectomy for 24 (71%).The maternal mortalities in this

study were 3 cases(9%) ,and maternal morbidity were 18 cases (35%) and there was 7 perinatal mortalities.

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**Table ( 3 ) .**Perioperative morbidity

Morbidity	number	Percentage
Fever	6	18 %
Wound infection	4	12 %
DIC	4	12 %
Bladder injury	3	9%
Broad ligamentary hematoma	1	3%

**DISCUSSION**

Emergency Peripartum hysterectomy is a life saving procedure when other measures do not succeed in halting peripartum bleeding <sup>4</sup>.The incidence of peripartum hysterectomy has declined recently and the indications has been restricted to emergency situations

The incidence of peripartum hysterectomy in USA is 1-3 per 1000 deliveries <sup>5</sup> .But some studies from other countries have reported remarkably lower incidence than USA ,0.2 per 1000 deliveries <sup>6</sup> .And other studies reported an incidence varies from 0.41 to 1.55 per 1000 deliveries <sup>7</sup> In our study the incidence was 4 per 1000 deliveries which considered high but this can attributed to many factors such as our hospital is a reference center for many hospitals at which the medical personnel and blood transfusions facilities not available, also other numerous factors as lower socioeconomic status ,lower income , low standards of health care , traditional habits , and delay in arriving to hospital .

The most frequent indication for emergency peripartum hysterectomy in our study was uterine atony followed by uterine rupture , other studies reported the most common cause is rupture uterus <sup>8</sup> .while others found placenta accreta the most common indication for emergency peripartum hysterectomy as reported by Kwee <sup>9</sup> .

Subtotal hysterectomy was the commonly performed surgery in our study as was in

other studies which may be due to the instability of the maternal conditions <sup>10</sup> , requiring a simple and speedy procedure with lower degree of hemorrhage .

But total hysterectomy must be performed in cases of placenta accreta and extended rupture uterus and that procedures associated with injury to the urinary tract .In our study , the maternal mortality was 3 cases (9%) that similar to other studies <sup>11</sup> . But other literatures reported lower percentage 0-4 % <sup>12</sup> . In contrast to other mortality reported by other studies <sup>13</sup> .

**CONCLUSION**

Emergency peripartum hysterectomy is usually performed as an emergency life saving operation . every Obstetric unit should have protocols and available blood and teaching courses to the young Obstetricians about the conservative and curative measures of Obstetric emergencies.

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