Emergency Peripartum Hysterectomy

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Abstract:
Objective: To estimate the incidence, indication, & complications associated with emergency peripartum hysterectomy in Amara hospital at Missan city at the south of Iraq.
Patients and Method:
Review of record from January1997 to December 2007 incidence of emergency peripartum hysterectomy, indication & complications were determined.
Result: There were 105 cases of emergency peripartum hysterectomy, for an over all incidence of 1.78/1000 birth. The indications for the hysterectomy were rupture uterus, placenta previa, uterine inertia, placental abruption, placenta accreta&finally uterine inversion. Uterine rupture was the most common indication with an incidence (51.4%).
Conclusion: uterine rupture still at certain places in the developing countries a common indication for emergency peripartum hysterectomy.
Keywords: peripartum hysterectomy

Introduction:

Emergency Peripartum hysterectomy is one of the lives saving procedure performed after vaginal delivery or caesarean birth or in the immediate postpartum period in cases of intractable haemorrhage with high incidence of fetal morbidity and mortality [1]

It is usually reserved for situation were conservative measures don't control hemorrhage. Most common indication for emergency peripartum hysterectomy has been uterine atony & uterine rupture [2,3] Life-threatening haemorrhage resulting from uterine rupture and atony has become rare events in the developed world1 but they continue to pose a major problem in obstetric care in developing countries.(4)recently the most common reported indication is placenta accreta and it is most likely related to the increase in number of cesarean section observed over the past two decades [5,6] because the rate of placenta accreta increased in conjunction with cesarean deliveries(7)The purpose of our study was to estimate the incidence,indications,&post operative complications associated with emergency hysterectomy at Amara hospital in Missan city.

Patients &Methods:

The present study was carried out in Amara hospital which is one of the two main hospitals associated to the government catering the whole missan city.

From the patients file records at Amara hospital we collect our information's about the whole number of peripartum hysterectomy (105 cases) for various indications between January 1997 to December 2007.Maternal characteristics like age, parity, residence were recorded .The indication for surgery, post operative complications were obtained.

Result

From January 1997 to December 2007, there were 58670 vaginal deliveries, 19865 cesarean deliveries&105 emergency hysterectomies given an incidence of cesarean hysterectomy of 1.78/1000 deliveries

Table 1. Incidence of cesarean hysterectomies

Total no. of vaginal deliveries	58670
Total no. of cesarean deliveries	19865
Incidence of cesarean hysterectomy	1.78/1000

majority of patients were referred from rural area (82%). As shown in table 2.

Table 2. Residence of patients requiring emergency hysterectomy.

Residence	Number of patients
Urban	19
Rural	86

The proportion of patients requiring hysterectomy increase from (23.8%) in 20-29 years to 65.7% in (30-39) years &showed a decline at 40 and above (10.4%) as shown in table 3.

Table 3. Age distribution of patients requiring emergency hysterectomy. (No. 105).

Age (years)	No. of patients
20-29	25 (23.8%)
30-39	69(65.7%)
40-49	11(10.4%)

All patients were multipara, majority of cases were grand multipara>6 number was 60 patients out of 105 as shown in table 4.

Table 4. Parity distribution of patients requiring emergency peripartum hysterectomy.

Parity	Number of patients
1-3	13
4-6	32
> 6	60
	105 total

The most common indication for emergency peripartum hysterectomy in our study was rupture uterus (51.4%), second indication was placenta previa (20%),third indication was uterine inertia(18%),for placenta accrete &placental abruption we had 5 cases for each(4.7%)& finally one patient diagnosed to have uterine inversion(0.95%), as shown in table 4.

Table 5: Indication of emergency hysterectomy

Indications	Number of patients	Percentage %
Rupture uterus	54	51.4
Placenta previa	21	20
Uterine inertia	19	18
Placenta accrete	5	4.7
Placental abruption	5	4.7
Uterine inversion	1	.0.95

Regarding post operative complications.

20 patients had urinary tract infection (20%), 14 patients had wound infection (13.3%), 6 patients had deep vein thrombosis (5.7%), one patient had lower respiratory tract infection (0.95%), additional complications included bladder injury 22 patients (20.9%), ureteric injury 1 patient (0.95%) & finally 7 patients (6.6%) had vesico -vaginal fistula as shown in table 6.

Table 6. Postoperative complications.

Post operative complication	Number of patients
Urinary tract infection	20
Wound infection	14
Deep vein thrombosis	6
Lower respiratory infection	1
Bladder injury	22
Uretericinjury	1
Vesicovaginal fistula	7

Discussion:

Early studies on peripartum hysterectomy included hysterectomy done for nonemergency conditions, & between 1950 and late 1970s cesarean hysterectomy was most commonly used for sterilization ,defective uterine scar , myoma &other gynecological disorders [2,8,9].Since the 1980s indications for peripartum hysterectomy have been restricted to emergency situation.[5,10 ,11].

The rate of peripartum hysterectomy reported in the earlier studies conducted by Chest nut et al [2] was 44 hysterectomies in 36561 deliveries were reported between 1963 &1983 for a rate of 1.2 per thousand deliveries. Were as Zelop et al [10] described 117 hysterectomies in 75650 deliveries between 1983 &1991 at arate of 1.55 per thousand deliveries

Some studies reported a rate of 0.2-1.5[12-13]some studies reported an incidence as high as 2.25 or 2.7 per thousand deliveries [11] However these are published rate of institutions within the united state.

Our study revealed an incidence rate of 1.78 per thousand deliveries which lies in between that in the studies mentioned above .Patients who underwent cesarean hysterectomy belonged more often to rural area (82%) than to an urban location (18%).

Up to 23.8% of patients undergoing cesarean hysterectomy were in age group of 20-29 years, rising to 65.7% in the age group 30-39 years &decline to 10.4% at age group 40-49years, similar trend were observed in year 2002 at Apex hospital of Kashmir valley [14].Majority of patients belonged to parity greater than 6(57.1%) &those of parity 4-6(30.4%) as those patients are at more risk of complications associated with pregnancy.

Chest nut et al[2] found that the major indication for the procedure was uterine rupture followed by uterine atony& placenta accreta .Clark et al [3]

reported uterine atony 43% to be the most common cause of emergency peripartum hysterectomy followed by placenta accreta 30% from 1978 to1982.However Stanco et al [5] studied the same population from 1985 to 1990 found that placenta accreta (50%) had become the most frequent cause with uterine atony account for 21%of cases.Similary Zelop et al [10] found that placenta accreta 64%& uterine atony 20% the most common causes of emergency peripartum hysterectomy.

A study done at community teaching hospital, department of obstetric gynecology at New York [15] also found that placenta accreta to be the most common indication for an emergency hysterectomy. This change in the trend of indication may be attributed to the increase in cesarean birth and uterine curettage over the past two decades; secondly it may be the result of better treatment with prostaglandin preparation decreasing the need for hysterectomy. While in our study still uterine rupture & uterine atony responsible for main indication for emergency peripartum hysterectomy this probably attributed to increased number of grand multiparity,secondly due to increased number of referral from rural areas.

Conclusion:

Uterine rupture still at certain place in our country a common indication for emergency peripartum hysterectomy.

Recommendation

1. The need for multipurpose workers in identifying high risk pregnancy and their timely referral
2. Proper mechanism of referral to higher hospital.
3. Posting of qualified and specialist surgeons..

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