Obstetric Hysterectomy in Modern Day Obstetrics: (A Review of 175 Cases Over a Period of 11 Years)

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Summary

The following is an analytical review of 175 cases of obstetric hysterectomy done at M.G.M. Medical College and M.Y. Hospital, Indore over a period of 11 years from Jan. 1988 to Dec. 1998. Total No. of deliveries in these 11 years were 66711 giving an incidence of 0.26%. Majority of patients were emergency cases. Rupture uterus was the commonest indication contributing to 69.7%.

Introduction

Obstetric hysterectomy is the hysterectomy performed on gravid uterus during pregnancy, labor and puerpeurium. Usually it is a catastrophic inevitable life saving emergency procedure in cases of rupture uterus, uncontrollable post partum hemorrhage, morbidly adherent placenta, cornual pregnancy and trauma.

Planned obstetric hysterectomy can be performed in conditions like pregnancy associated with Ca Cx and invasive molar pregnancies diagnosed ultrasonographically. The incidence of obstetric hysterectomy varies from center to center depending upon available obstetric facilities like antenatal care. Intranatal meticulous monitoring, trained paramedical personnel and obstetric performance at peripheral medical centers.

Objectives

1. Comparative analysis of the incidence of obstetric hysterectomy during the study period.
2. In depth study of the etiological factors resulting in obstetric hysterectomy.
3. Evaluation of the factors influencing the changing trends in obstetric hysterectomy.
4. Study of maternal mortality with obstetric hysterectomy.
5. Critical analysis of perinatal outcome in cases who have undergone obstetric hysterectomy.
6. Study of avoidable factors in obstetric hysterectomy.

Material & Methods

This is an evaluatory study to know the incidence of obstetric hysterectomy and to analyze the changing trends in the same.

Study includes hysterectomies performed in emergency during pregnancy, labor and perpeurium. It also includes hysterectomies done for complications following pregnancy termination, such as perforation, sepsis etc. Each case record was analyzed in detail with special emphasis on indication, demographic details (age, parity, booked or emergency etc.) type of operation performed, problem encountered during operation, morbidity and mortality.

Observations

Table-I
Incidence of Obstetric Hysterectomy

Statistical Data	Number
Number of deliveries	66711
Number of Caesareans	11246
Number of Obstetric Hysterectomy	175
Ratio of Obst. Hyst. to Delivery	1:381
Incidence of Obst. Hyst.: Deliveries	0.26%
Ratio of Obst. Hyst.: Caesarean	1:64.2
Incidence of Obst. Hyst. In Caesarean	1.5%

Table II
Comparision of other series with Ours: Incidence

Authors	Country	Emergency Hysterectomy %
Sturdee and Rushton (1986)	U.K.	0.05%
Ambiye et al (1988)	India	0.12%
Present series	India	0.26%

Table III
Distribution of Obstetric Hysterectomy Cases According to Age Group

Age	Number of Cases	Percentage
≤ 20 years	4	2.3
21-25 year	68	38.9
26-30	15	42.9
> 30 years	28	16

Table IV
Distribution of Obstetric Hysterectomy Cases according to Parity

Parity	Number of Cases	Percentage
0	2	1.1
1	26	14.9
2	35	20
3	36	20.6
4 & Above	76	43.4

Table V
Distribution According to Educational Status

Education	Number of Cases	Percentage
Nil	112	64
Primary	28	16
Middle	14	8
High School	15	8.6
Graduate	6	3.4

Table VI
Incidence of Obstetric Hysterectomy Cases Booked/ Emergency

Type	Number of Cases	Percentage
Booked	13	7.4
Emergency	162	92.5

Table VII
Indication for Obstetric Hysterectomy

	Number of Cases	Percentage
Rupture Uterus	122	69.7
- Obstructed Labor	58	33.1
- Previous Scar	49	28.0
- Haematoma	10	5.7
- Inadvertent use of Pitocin	3	1.7
- Arrow Injury	1	0.57
- Secondary Abdominal pregnancy	1	0.57
PPH	30	17.1
- Placenta Accreta	11	6.3
- Placenta Previa with Atonic PPH	10	5.7
- Atonic PPH	7	4.0
- Traumatic PPH	1	0.6
- Secondary PPH	1	0.6
MTP Perforation	8	4.6
- I Trimester	5	2.9
- II Trimester	3	1.7
Ectopic Pregnancy	6	3.4
Vesicular Mole	4	2.3
Septic Abortion	3	1.7
Sepsis (PN)	2	1.1

Table VIII
Perinatal Outcome in 175 cases

Health Status	Number	Percentage
Alive	46	29.5
PNM	110	70.5
- FSB	90	57.7
- MSB	18	11.5

Discussion

(Table I) The incidence of Obstetric hysterectomy is 0.26%. Obstetric hysterectomy incidence was quite low in a study at National University Hospital of Singapore by Chew and Biswas (1998) i.e. 0.0392%. which was due to availability of high standards of obstetric care and liberal use of caesarean section in high risk deliveries. Comparison of incidences of obstetric hysterectomy from various series is shown in (Table II).

Age group of 21-30 years accounted for highest incidence of obstetric hysterectomy i.e. 81.8% (Table-III).

As shown in Table IV obstetric hysterectomies increased with increasing parity being maximum 64% in Para 3 and above taken together. Whereas it was only 20% in Para 2 group. 43.4% cases were grand multiparas.

Maximum number of cases were uneducated i.e.

Table IX
Incidence of Obstetric Hysterectomy in relation to Number of Deliveries

Year	Maternal Mortality	No. of Caesarean	No. of Deliveries	No. of Obstetric Hysterectomy	Incidence of Obstetric Hysterectomy/ 1000 deliveries
1988	1	820	5344	13	2.4 [illegible]
1989	0	856	6878	08	1.2 [illegible]
1990	0	952	7147	15	2.1 [illegible]
1991	0	858	7137	16	2.2 [illegible]
1992	4	1051	7383	12	1.6 [illegible]
1993	3	985	6547	31	4.7 [illegible]
1994	2	788	5131	19	3.7 [illegible]
1995	1	1128	4832	13	2.4 [illegible]
1996	2	1190	5497	13	2.4 [illegible]
1997	2	1712	5627	17	3.0 [illegible]
1998	4	868	5188	19	3.7 [illegible]
Total	19	11246	66711	175	Average= 26%

64.0%. Table V. Sixteen percent cases were educated upto primary level. Negligence regarding their own health and health care programs among uneducated group has contributed maximally to obstetric hysterectomy.

Out of 175 cases 92.5% were emergency cases and only 7.5% cases were booked (Table VI).

Indications (Table VII): Rupture uterus: It was commonest indication for obstetric hysterectomy viz. 69.7%, out of which 28% cases had a previous scar that gave way during labour and 33.1% had obstructed labour while 5.7% cases had ligamentary haematoma. Arrow injury (trauma) and secondary abdominal pregnancy accounted for 1 case each. This is quite comparable to the study by Kulkarni et al (1997).

Post partum hemorrhage: It was 2nd most common indication for obstetric hysterectomy (17.1%). Placenta previa and accreta constituted 5.7% and 6.3% cases respectively in this category. In 4% cases atonic PPH was the indication for obstetric hysterectomy.

Among other indications MTP perforation accounted for 4.6%, ectopic pregnancy 3.4%, vesicular mole 2.3%, septic abortion 1.7% and PN sepsis 1.1%.
Perinatal outcome (Table VIII): In this group fresh still births were 58.3%, live births 29.9% and macerated still births 12.2%.

Maternal outcome: Maternal mortality incidence was 10.90% (Table IX).

In Allahabadia & Vaidya's (1991) series maternal mortality incidence was [illegible] Sturdee & Rushton (1986) from Birmingham Maternity Hospital over 15 years with 47 obstetric hysterectomies showed no maternal mortality. Recent [illegible] University series recorded 6 maternal deaths in 9 caesarean hysterectomies i.e. 0.66% (Plauche 1986).

Conclusions

In modern obstetrics caesarean hysterectomy is an occasional surgical procedure in developed countries. Ratio of emergency to elective obstetric hysterectomy is very high in developing countries. Its incidence can be reduced by improving socio-economic status, literacy rate, antenatal registration and timely referral and transfer of patient.

Better diagnostics and good laboratory backup help in avoiding emergency obstetric hysterectomy.

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