

Obstetrics Hysterectomy - Five Years Experience At Jinnah Postgraduate Medical Centre, Karachi

Pages with reference to book, From 86 To 88

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Abstract

During the five yeais period (1st January1988 to 31st December1992), 106 hysterectomies were performed for obstetric indications in the Department of Obstetrics and Gynaecology, Jinnah Postgraduate Medical Centre (JPMC), Karachi. The frequency was 1 in 331 deliveries (total 35,172 deliveries). In all except one hysterectomy was performed as a life saving measure. The major indications were ruptured uterus in 61 (58%) cases and severe postpartum haemorrhage due to uterine atony in 18 (17%). Other indications included haemorrhage due to placenta praevia in 11(10%), placenta accreta 7(7%) and abruptio placentae 5 (5%), severe infection 2 (2%) and broad ligament haematoma following caesarean section 1 (1%). There were 10 (9%) maternal deaths all due to severity of the conditions necessitating hysterectomy. Obstetric hysterectomy can save many lives but requires proper judgement and skill. Senior resident staff in obstetric units in the developing countries should be trained for it (JPMA 45: 86,1995).

Introduction

Obstetric hysterectomy is removal of utems at the time of caesarean section, following caesarean section, iinmediately after vaginal delivery or in the period of puerpenum in order to reduce the maternal mortality and morbidity. Hysterectomy in developed countries is mainly done for gynaecological indications (Sterilization, leiomyoma) in obstetric practice and in developing countries as an emergency procedure for haemorrhage and ruptured uterus. This study reports our five years experience of obstetric hysterectomy.

Patients and Method

JinnahPostgraduate Medical Centre (JPMC),Karachi is one of the three major hospitals in a city of over 10 million population. The department of obstetrics and gynaecology has 135 beds, admitting over 10,000 cases annually. About 7000 deliveries are done here each year of which approximately 60% are unbooked. They come as emergencies fmm smaller hospitals, clinics, nursing homes and traditional birth attendents or are seif-refened. Some patients come from the interior of Siindh and Balochistan (distances varying from 50-500 km) with most serious problems and complications.

Case records of all patients who underwent obstetric hysterectomy at JPMC during the 5 year period were stUdied. Age, parity, booking status, indications, type of operation performed, complications and the maternal and foetal morbIdity and mortality were recorded.

Results

During the study period there were 35,172 total deliveries, of which 29,059 were vaginal deliveries and 6,113 caesarean sections. One hundred and six women underwent obstetric hysterectomy. Thirty-two (30%) followed vaginal deliveiy and 74 (70%) during the course of or following caesarean section.

The frequency of obstetric hysterectomies thus was 1 in 331(0.3%) of all deliveries. Among vaginal deliveries it was 0.1% and among caesarean sections 1%. One elective caesarean hysterectomy was carried out on a 17 year old unmarried girl who had severe mental retardation. Hysterectomy was performed for the purpose of termination of pregnancy and to induce amenorrhoea as well, as the patient was not able to cope with the menstrual periods. All others were emergency obstetric hysterectomies done as life saving procedures. Majority (95%) of the patients were unbooked and referred to JPMC from traditional birth attendants, midwives and small maternity homes as postpartum haemorrhage and ruptured uterus. Most of them were received in a state of shock. Five (47%) patients were booked. They delivered in JPMC and required hysterectomy mainly for postpartum haemorrhage. All patients belonged to low socioeconomic class. Their ages ranged between 17-42 years with an average age of 31 years. One was a primigravida (the patient with mental retardation) and the rest were multiparous. Parity ranged between 2-17 with a mean of 7. Seventy-five percent of patients were grand multiparae (5 and more previous deliveries). Duration of pregnancy was full term in 8(76%), preterm in 16(15%) and post-term in 9(8%) patients. Seventy-four (70%) hysterectomies were performed during the course of or following caesarean section, 28 (26%) soon after vaginal deliveries and 4(4%) in the puerperium. All operations were total abdominal hysterectomies with preservation of ovaries and were performed by consultant obstetricians or by experienced senior registrars. The operating time in the majority of the patients ranged between 1-1/2 to 2 hours and in four patients it lasted for 6-7 hours because of difficulty in securing haemostasis. All patients had blood transfusion. A minimum of two units and a maximum of 21 units were given as indicated.

Table I. Obstetric Hysterectomy - Indications.

Indications	Number	Percentage
Ruptured uterus (ruptured uterus with ruptured bladder - 3)	61	57.7
Postpartum haemorrhage (uterine atony)	18	16.9
Major degree of placenta praevia	11	10.4
Placenta accreta	7	6.7
Abruptio placentae	5	4.7
Severe infection	2	1.8
Broad ligament haematoma	1	0.9
Mental retardation	1	0.9

Table I shows the indications. Sixty-one (58%) patients underwent hysterectomy for ruptured uterus, 53(87%) having rupture of an unscarred uterus and 8 rupture of a previous caesarean section scar. Three of these were, associated with rupture of bladder. Three (5%) had traumatic rupture of uterus during obstetric manipulations. One internal version to correct transverse lie of dead foetus, another during delivery of an undiagnosed hydrocephalic baby and the third during delivery of an anencephalic baby with shoulder dystocia. All were admitted in labour and the ruptures were discovered after delivery. All patients with rupture of unscarred uterus were grand multiparae. Fourteen (23%) patients had history of oxytocin injection given as bolus dose by traditional birth attendant at home. Twenty-three (38%) patients had cephalopelvic disproportion and 13 (21%) had malpresentation. Uterine rupture was diagnosed during labour in 48 (79%) and after vaginal delivery in 13 (21%) patients.

Sixteen (15%) women who had hysterectomy came in moribund condition with severe uterine atony causing persistent uterine bleeding and failed to respond to conservative measures. In 5 (5%) patients even uterine packing failed to control bleeding. Two patients had severe secondary postpartum haemorrhage occurring after 10-18 days following normal home delivery. Persistent bleeding in 11(10%) patients with placenta praevia necessitated hysterectomy. In 3 patients with 2 and 3 previous caesarean section the placenta was adherent to previous scar causing profuse and continuous haemorrhage.

Seven women underwent hysterectomy due to placenta accreta. Two had spontaneous vaginal delivery followed by unsuccessful manual removal of placenta and torrential haemorrhage. In the remaining 5 patients the condition was discovered at caesarean section. All these patients had a uterine scar from previous 2 or 3 lower segment caesarean sections. In 5 (5%) patients severe abruptio placentae (Couvelaire uterus) necessitated hysterectomy. Two of them were associated with hypofibrinogenaemia which required large quantities of fresh blood and blood products before and during surgery. Two patients had hysterectomy due to severe infection. One had burst abdomen on the sixth postoperative day of caesarean section performed for obstructed labour. The uterus and tubes were grossly infected and were removed. The other was admitted with gas gangrene six days following home delivery of a macerated baby. One patient with broad ligament haematoma required hysterectomy in immediate postoperative period after caesarean section for cephalopelvic disproportion. Intraoperative and postoperative complications occurred in 73 patients (Table II)

Table II. Intra-operative and post-operative complications (n=73).

Complications	Number
Haemorrhage	4
Genital tract infection	20
Wound infection	21
Urinary tract infection	9
Chest infection	6
Septicaemic shock	3
Burst abdomen	3
Paralytic ileus	5
Rectovaginal and vesicovaginal fistula	1
Jaundice (haemorrhage after blood transfusion)	1

Infection was the commonest complication. The patient who developed vesicovaginal and rectovaginal fistula had obstructed labour. There were 10(9%) maternal deaths. Two patients died on the operating table due to massive haemorrhage. Three died soon after the operation from irreversible haemorrhagic shock due to ruptured uterus. Two patients died because of disseminated intravascular coagulation. One patient who had uterine infection had massive pulmonary embolism on the seventh postoperative day and one died from uraemia (despite haemodialysis) following postpartum haemorrhage. There were 72(78%) perinatal deaths. Fifty nine (56%) were stillborn, 54 of these due to ruptured uterus and 5 due to abruptio placentae. Thirteen (12%) were neonatal deaths due to intrauterine hypoxia. Thirty-four

(32%) babies were alive and well.

Discussion

In this series, the decision to perform emergency hysterectomy was easier in highly parous women, unlike low parity women, where this difficult decision was made to save the women's life. Being a tertiary referral centre mostly receiving complicated cases, the incidence of the procedure after caesarean section (1.2%) and vaginal delivery (0.1%) is higher than other reported series^{3,4}. The indications for hysterectomy were similar to those of other developing countries⁷ but different from the developed world^{7,8}. In the West, rupture of the uterus is frequently dehiscence of the caesarean section scar, where repair is easier^{3,4}. In the present series spontaneous extensive rupture of the unscarred uterus, due to grand multiparity, disproportion or mal presentation, distorts the anatomy, to an extent, leaving hysterectomy as the only option.

Uterine packing of an atonic uterus is considered a hazardous procedure^{9,10} but is frequently carried out in the department with good results. Internal iliac artery ligation was not done in any case. The lower frequency of previous caesarean section in our population could be the reason for the lower occurrence of placenta accreta, than reported in recent literature⁶⁻¹¹. A survival of over 90% is attributed to meticulous technique, good anaesthesia and liberal blood transfusion, despite the poor conditions necessitating hysterectomy. Deaths were due to the severity of the problems for which hysterectomy was indicated rather than the procedure itself. Obstetricians, well trained to handle emergency who act at the optimal time with clear judgement, using surgical technique with speed, can reduce mortality and morbidity in such patients.

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