

general anesthesia. In seven cases, vulvo-vaginal haematoma was seen. Five of these cases were delivered at the J.P.M.C.

**TABLE VII**  
**OTHER OBSTETRICAL INJURIES**  
21

Place of delivery	Ut. inversion	Cx tear	Vulvo-vaginal-haematoma
Delivered at Home	-	1	4
Delivered in another hospital	1	2	4
JPMC	-	4	5
Total	1	7	13

#### Conclusion and Discussion

Obstetrical major injuries occur more commonly in patients who had poor antenatal and intranatal care or had no care at all<sup>1,2</sup>. Patients with previous L.S.C.S either stay at home in subsequent labour or get booked in small nursing homes, without operation facilities<sup>3,4</sup>. The delay in reaching the hospital, results in rupture of uterus. Vesico-vaginal and rectovaginal fistulae occur in cases of prolonged labour with cephalopelvic disproportion<sup>5,6,7</sup>. Cervical tears and vulvo-vaginal haematoma are seen in cases handled by inexperienced personnel. Hence the importance of nursing home delivery and family planning cannot be over emphasized<sup>4</sup>.

In the study the most common and serious injury was rupture of uterus and most serious morbidity was vesical fistulae. The prevalence of these injuries is very high as compared to western figures, where incidence of rupture uterus is 1 in 2500 deliveries<sup>3</sup> and vesico-vaginal fistula is no more of obstetrical origin. Vesico-vaginal fistula is relatively common complication in 3rd world countries especially in rural areas where antenatal and intrapartum care is not available.

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**Parity and Management of patients with Uterine Rupture (Table III & IV)**

Out of 23 cases, 13 were multiparous. Two patients had one previous delivery each. Total hysterectomy was done in 18 cases because of the nature of the tear and multiparity of the patients. In five patients only repair of the uterus was done because of low parity. In 10 patients, repair of uterus with tubal ligation was done.

**TABLE III  
RUPTURED UTERUS  
TOTAL NO. 23**

Type of Rupture Uterus	1	2	3	4	5	6	7 & over	Total
Previous LSCS	1	-	3	1	2	-	-	7
Spontaneous	1*	1	2	1	4	2	3	14
Syntocinon Adm.	-	-	-	-	-	-	1	1
Traumatic	-	-	-	-	-	1	-	1
<b>Total</b>	<b>2</b>	<b>1</b>	<b>5</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>4</b>	<b>23</b>

\* Hydrocephalus para 5 +0 -13 (56.5%)

**TABLE IV  
TREATMENT OF RUPTURED UTERUS  
TOTAL NO. 23**

Operation	No of cases
Total Hysterectomy :	18
Repair and tubal Ligation:	10
Repair Alone:	05
<b>Total</b>	<b>23</b>

Complications 2 VVF  
1 Burst abdomen

**Vesico- vaginal Fistula (Table V)**

In 16 cases, vesico-vaginal fistula occurred. Seven cases of vesico-vaginal fistula were admitted with history of delivery at home. In five cases, forceps delivery was conducted in peripheral hospitals, after prolonged labour. Four cases were delivered at the J.P.M.C.

after prolonged labour outside the hospital. Out of these, craniotomy was done for the dead fetus in two cases while two patients were delivered by forceps.

**TABLE V  
VESICO-VAGINAL FISTULA  
TOTAL NO. 16**

Place of delivery	No of cases
Delivered at Home	07
Delivered in another hospital	05 All forceps deliveries
Admitted to JPMC after prolonged labour	04 2 Craniotomies, 2 forceps deliveries
<b>Total</b>	<b>16</b>

**Perineal Injuries (Table VI)**

Seven patients had 3rd, degree perineal tear and 4 cases developed recto vaginal fistula. Six of these patients were delivered at home. Four patients were delivered in some other hospital while one patient was delivered at the J.P.M.C.

**TABLE VI**

**PERINEAL INJURIES**

**RECTO-VAGINAL-FISTULA-THIRD DEGREE PERINEAL TEAR  
TOTAL NO. 16**

Place of delivery	No of cases
Delivered at Home	06
Delivered in another hospital	04 2 Forceps deliveries
Delivered in JPMC	01 Forceps deliveries
<b>Total</b>	<b>11</b>

2 patients had both RVF + Third degree perineal Tear.

**Other Injuries (Table VII)**

Inversion of the uterus was seen in one case. This patient was delivered in private hospital and was referred in shock. On examination, inversion was diagnosed and repositioning was done under

## OBSTETRICAL INJURIES A STUDY AT JINNAH POSTGRADUATE MEDICAL CENTRE, KARACHI

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### Abstract

Seventy one cases of obstetrical injuries, seen during a period of 1<sup>1/2</sup> years, were analysed. Twenty three (32.4%) cases had rupture of uterus, 16 (2.5%) developed vesico-vaginal fistulae following prolonged and obstructed labour. In 13 (18.4%) cases, vulvo-vaginal haematoma was seen. Four (5.6%) patients had recto-vaginal fistulae and 7 (9.9%) suffered from 3rd degree perineal tear. 1.4% i.e. one case came with inversion of uterus.

**KeyWords** Injury, Uterus, Vagina, Fistulae, Haematoma, Obstetric injury

### Introduction

Child birth is a normal physiological process. But there are times when severe injuries may occur as a result of it and may prove fatal or contribute significantly towards maternal morbidity. The aim of this study is to analyse the frequency of obstetrical injuries, during labour and to determine the contributing factors.

### Patients and methods

Analysis of cases of obstetrical trauma seen in patients admitted over a period of 1<sup>1/2</sup> years, in the department of Obstetrics and Gynaecology at the Jinnah Postgraduate Medical Centre, was done. Minor problems like 1st degree perineal tear and 2nd degree perineal tear have not been included. From January, 1991 to 30th June, 1992 the total number of deliveries were 9124 and number of injuries were 71. Out of those 8 injuries occurred in the hospital while 63 injuries occurred before admission either at home or in some peripheral hospital.

### Result

#### Type of Injuries (Table I)

Rupture of uterus occurred in 23 cases i.e. 32.4% 16 cases i.e. 22.5% developed vesico-

vaginal fistula. Four cases i.e. 5% developed recto-vaginal fistula. Seven i.e. 9.9% cases had 3rd degree perineal tear. In 13 cases i.e. 18.4%, vulvo-vaginal haematoma was seen. Inversion of uterus occurred in one patient i.e. 1.4%.

TABLE I

MAJOR OBSTETRICAL INJURIES  
TOTAL NO. 71

TYPE OF INJURIES	NO.	%
Ruptured uterus	23	32.4
Cervical Tear	07	09.8
Vesio-vaginal Fistula	16	22.5
Recto-vaginal Fistula	04	05.6
Third degree perineal tear	07	09.9
Vulvo-vaginal haematoma	13	18.4
Inversion of uterus	01	01.4
Total	71	100.00

#### Analysis of cases of Rupture Uterus (Table II)

Out of 23 case, one case had uterine rupture following a fall from stairs. Twenty two cases had rupture in labour. Out of these, seven patients had a previous caesarean section scar in the uterus. Fourteen patients had spontaneous rupture. In only one patient, there was a definite history of Oxytocin administration.

TABLE II

RUPTURED UTERUS  
22 + 1\*

Type of Rupture	Home Del.	Adm. to JPMC following prolonged labour		Delivered in JPMC	Total
		At Home	At Another Hosp.		
Previous LSCS	-	5	2	-	7
Spontaneous	1**	12	1	-	14
Syntocinon Adm.	-	-	-	1	1
	1	17	3	1	22

\* Para 6+0 admitted with ruptured uterus following a fall

\*\* Retained placentas

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